



**“It’s All About Love”: Organization, Knowledge Sharing  
and Innovation Among the Nigerian Yahoo Boys**



**Andreas Doppelmayr**

Master's thesis at the Centre for Technology, Innovation and Culture (TIK)  
Faculty of Social Science, University of Oslo

Fall 2013  
110 pages

**Cover photo (private):**

Internet café in Ile-Ife, Nigeria





# Acknowledgements

DEAR SIR/MADAM,

IT IS MY GREAT PLEASURE TO INFORM YOU THAT YOU HAVE BEEN GRANTED THE EXCLUSIVE OPPORTUNITY TO READ THIS M.A. THESIS. THE ESTIMATED TOTAL WORTH OF LIFETIME SALES OF THIS DOCUMENT IS CALCULATED TO USD 1,000,000,000.00 (ONE HUNDRED MILLION US DOLLARS) BY THE TIK CENTRE AT THE UNIVERSITY OF OSLO. BY PROVIDING A DEPOSIT OF USD 10,000.00 (TEN THOUSAND US DOLLARS) TO THE BELOW BANK DETAILS, YOU ARE ENSURED A 10% (TEN PERCENT) ROYALTY AGREEMENT THAT IS ESTIMATED TO PROVIDE YOU WITH AT LEAST USD 10,000,000.00 (TEN MILLION US DOLLARS) OVER THE NEXT 10 YEARS. PLEASE REPLY IMMEDIATELY TO ENSURE THAT YOUR INVESTMENT OPPORTUNITY WILL STILL BE AVAILABLE!

Actually, I'm sorry to inform you that the above investment opportunity is nothing but an example of Internet fraud. However, while the chances of making any financial gains from this thesis are quite small, I hope that it at least will provide you with some new insights and knowledge. And you never know, perhaps some of that knowledge one day will save you a substantial amount of money by not becoming a victim of Internet fraud. In that case, you know whom to thank for saving you all that cash! And while I could take all the credit, there are in fact a number of people I need to thank myself.

First and foremost, without the assistance of my co-supervisor Dr. Kamela Heyward-Rotimi, none of this research would have been possible. The amazing hospitality of Kamela and her family made the stay in Nigeria an experience I will look back to with joy for years to come. Kamela's feedback on my thesis has also been invaluable. Thank you!

I also owe a big thank you to all the informants who agreed to be interviewed, as well as the students and staff at the Obafemi Awolowo University who I was fortunate to meet. Although I'm still skeptical of certain emails from Nigeria, I'm not skeptical of Nigerians – who proved to be friendly, entertaining and knowledgeable. Thank you to the TIK Centre for providing 5000 NOK towards travel expenses. I am also grateful to all the students, staff, friends and family who have made the last few years both educational and fun. Thank you to Erlend Osland Simensen, Jørn Wichne Pedersen, Johan Brox and Øyvind Handberg for proofreading. Last, but not least, my supervisor Morten Fosaas deserves recognition for his valuable insights, comments and criticism. Any faults or errors still present are entirely mine.

Andreas Doppelmayr, Oslo, November 2013



# **Abstract**

Entrepreneurial Nigerian youths called “Yahoo boys” are believed to annually cause billions of U.S. dollars in damages to millions of individuals all over the world. Through the use of qualitative interviews and observations in Nigeria, this thesis seeks to investigate the previously unexplored reasons for the Yahoo boys’ apparent success in conducting Internet fraud. The main finding is that the Yahoo boys have organized themselves into tightly knit communities of practice where mutual engagement, joint enterprise, and a shared repertoire of stories, jargons, and discourse are key characteristics. This mode of organization has enabled the Yahoo boys to effectively distribute the predominantly tacit skills and knowledge required for desired success in Internet fraud. Skills, tools and services not found in the community of practice are sourced through an external network of suppliers located both in the criminal and legitimate business sector. Although most of the Yahoo boys’ innovations would be labeled imitations in the strictest definition of the term, they have adapted new technologies to their local context and rapidly exploited new markets and sources of supply in order to warrant the term innovation being applied. This thesis provides new insights into a previously unexplored phenomenon in the field of innovation studies. Further, the thesis contributes new knowledge to the discussion of what innovation entails, how it can be effectively utilized, and what forms of organization could be useful for achieving growth.





# Table of contents

<b>Acknowledgements .....</b>	<b>v</b>
<b>Abstract .....</b>	<b>vii</b>
<b>Table of contents .....</b>	<b>ix</b>
<b>List of tables .....</b>	<b>xiii</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 Research questions .....	2
1.2 Thesis overview .....	3
<b>2 Contextual framework .....</b>	<b>5</b>
2.1 Nigeria .....	5
2.1.1 A nation divided .....	6
2.1.2 Oil – A blessing and a curse .....	7
2.1.3 Military coups and the rise of 419 .....	8
2.1.4 Transition to democracy and present-day Nigeria .....	10
2.2 The Yahoo boys .....	11
2.2.1 On the origins .....	12
2.2.2 Characteristics .....	15
2.2.3 Underlying reasons and motives .....	17
2.2.4 Summary .....	23
2.3 Internet fraud .....	23
2.3.1 The financial impact of Internet fraud .....	24
2.3.2 Types of Internet fraud .....	26
<b>3 Conceptual framework .....</b>	<b>35</b>
3.1 Innovation .....	35
3.2 Knowledge .....	36
3.2.1 What is knowledge? .....	37
3.2.2 The epistemology of possession .....	38
3.2.3 The epistemology of practice .....	39
3.2.4 Choice of epistemological starting point .....	40
3.3 Communities of practice .....	41
3.4 Trust .....	44

<b>4</b>	<b>Methodology and research approach.....</b>	<b>47</b>
<b>4.1</b>	<b>Research questions and choice of method.....</b>	<b>47</b>
4.1.1	First steps.....	47
4.1.2	Research questions .....	48
4.1.3	Choice of method .....	48
4.1.4	The qualitative research method.....	49
<b>4.2</b>	<b>Data collection.....</b>	<b>50</b>
4.2.1	Safety issues .....	50
4.2.2	Location and duration .....	50
4.2.3	Interview preparations .....	51
4.2.4	Access to informants .....	52
4.2.5	Interviewing.....	53
<b>4.3</b>	<b>Informants .....</b>	<b>55</b>
<b>4.4</b>	<b>Ethics and informant safety .....</b>	<b>57</b>
<b>4.5</b>	<b>Analysis.....</b>	<b>59</b>
<b>4.6</b>	<b>Reliability and validity .....</b>	<b>60</b>
4.6.1	Reliability .....	60
4.6.2	Validity .....	61
<b>4.7</b>	<b>Biases.....</b>	<b>61</b>
<b>5</b>	<b>Empirical findings and analysis – Part 1 .....</b>	<b>63</b>
<b>5.1</b>	<b>The evolution of the Yahoo boys COPs.....</b>	<b>64</b>
5.1.1	The “cybercaf” COPs .....	65
5.1.2	The university COPs .....	67
<b>5.2</b>	<b>Entry into the COP .....</b>	<b>67</b>
5.2.1	Personal relations.....	67
5.2.2	Legitimate peripheral participation .....	68
5.2.3	Trust .....	69
5.2.4	Summary .....	70
<b>5.3</b>	<b>Characteristics of the COP .....</b>	<b>70</b>
5.3.1	Mutual engagement .....	70
5.3.2	Joint enterprise .....	72
5.3.3	Shared repertoire .....	73
5.3.4	Other characteristics and modes of organization.....	77
<b>5.4</b>	<b>Discussion of question 1 .....</b>	<b>78</b>
5.4.1	Potential limitations and weaknesses.....	79

<b>6</b>	<b>Empirical findings and analysis – Part 2 .....</b>	<b>81</b>
6.1	Skills and knowledge found among the Yahoo boys.....	81
6.1.1	The Yahoo boys’ skills and knowledge.....	81
6.1.2	The influence of the organizational and cultural context .....	83
6.2	Sharing skills and knowledge .....	84
6.2.1	Sharing skills and knowledge in the COP .....	84
6.3	External skills, knowledge and tools .....	86
6.3.1	Other Yahoo boys or criminals .....	87
6.3.2	Legitimate businesses and services.....	89
6.4	Discussion of question 2 .....	91
<b>7</b>	<b>Empirical findings and analysis – Part 3 .....</b>	<b>93</b>
7.1	Yahoo Yahoo – A set of innovations.....	93
7.2	Internet auction and credit card fraud .....	95
7.3	Nigerian letter and advance fee fraud.....	99
7.4	Internet dating and romance fraud.....	101
7.5	Discussion of question 3 .....	103
<b>8</b>	<b>Concluding remarks .....</b>	<b>105</b>
8.1	Summary of the three specific research questions.....	105
8.2	Discussion of the overarching research question.....	106
8.3	Implications, limitations and further research.....	107
8.4	The future of Yahoo Yahoo .....	108
	Reference list.....	111
	Appendix 1 – Interview guide .....	1



## List of tables

Table 2.1: The most common Internet fraud methods among the Yahoo boys .....	34
Table 3.1: Indicators that a community of practice has formed .....	43



# 1 Introduction

In 1993, CERN announced that the World Wide Web technology would be available on a royalty-free basis (CERN, 2013). Twenty years later, the Internet has become an indispensable part of work and leisure for billions of people around the world, providing a foundation for countless innovations and economic growth. However, not all effects of the Internet have been positive. One undesirable consequence is the growth of cybercrime. It is estimated that the annual damages of global cybercrime amount to anywhere between 300 billion and 1 trillion USD, affecting 556 million people worldwide (Lewis & Baker, 2013, p. 5; Symantec, 2012). According to Symantec (2011), “cybercrime costs the world significantly more than the global black market in marijuana, cocaine and heroin combined (\$288 billion)” (para. 1).

Internet fraud, a subsection of cybercrime, is believed to make up roughly 40% of cybercrime in general (Symantec, 2012). In a small country such as Norway, the reported losses amounted to almost 35 million USD in 2012 alone (Eggesvik, 2013). However, the UNODC (2013, p. 7) noted that the proportion of victims who actually report being defrauded ranges upward from one percent, suggesting that the actual losses are substantially higher.

Perhaps even more astonishing than the size of the financial losses and the number of individuals affected, are the stories and backgrounds of some of the perpetrators. Known as “Yahoo boys,” they are believed to primarily consist of young students with few options for future employment in their home of Nigeria, a West African country perhaps most prominently associated with civil war, decades of military rule, poverty, and corruption (Aransiola & Asindemade, 2011). Nonetheless, these Nigerian youths provide a prime example of effective organization, knowledge exchange and innovation.

Due to the illegal nature of Internet fraud and the general security situation in Nigeria, gaining access to the Yahoo boys communities poses a significant challenge. Thus, research on this topic is not only non-existent within the innovation studies literature, but in most other academic fields as well. My goal with this thesis is to contribute new knowledge on a phenomenon that is affecting millions of people all over the world, but arguably little understood in the wider context of Nigerian society. Although the practice of the Yahoo boys should in no way be romanticized, I also hope that the findings can provide a somewhat more nuanced view of the perpetrators than what is sometimes portrayed in the media and general public discussion.

## 1.1 Research questions

The overarching research question of this thesis is as follows:

*What are the main reasons for the Yahoo boys' apparent success in conducting Internet fraud?*

In order to limit the scope of the overarching question, it will be discussed on the basis of three specific questions. Each of these questions details one of the three key reasons that are perceived to be relevant based on the innovation studies literature: (I) Organization, (II) skills and knowledge transfer, and (III) types of innovations:

1. *What characterizes the organization of the Yahoo boys?*
2. *What skills and knowledge are common among the Yahoo boys and how are they shared? What skills, tools and services are procured externally?*
3. *What are the main innovations that have taken place among the Yahoo boys?*

In order to explore the Yahoo boys culture, an inductive qualitative research approach was chosen. Due to the lack of prior research, even basic background information on the topic was scarce. Thus, research in Nigeria had to be conducted before a compatible theory could be selected and the research questions finalized. During the interviews, informants pointed out that innovation and knowledge exchange primarily occurred in networks consisting of informal ties. Powell & Grodal (2005) noted that “relatively few studies, however, link informal ties to the innovation process ...” (p. 70). The communities of practice (COPs) theory proved to be a useful framework for analyzing how the Yahoo boys organize themselves and exchange knowledge. Although there unquestionably are other suitable theoretical frameworks that could have been employed, the COPs theory allowed for a broad analysis of the empirical data. In order to discuss the innovations that have occurred within the Yahoo boys communities, a Schumpeterian view of innovation has been applied.

Rather than presenting a narrow analysis of a phenomenon, I have in this thesis chosen a wider approach. I argue that on the basis of the considerable difficulties in gaining access to empirical data and the novelty of the research, an eclectic use of theory and analytical levels is warranted in order to introduce a wider range of the findings.



## 1.2 Thesis overview

Chapter 2 presents the contextual framework of the thesis. In section 2.1, an overview of Nigeria and the country's history will be provided. Section 2.2 offers an overview of the Yahoo boys, and section 2.3 outlines Internet fraud and the various methods employed.

Chapter 3 contains the literature review. Innovation will be defined and briefly examined in section 3.1. Knowledge and the epistemological foundation of the thesis will be discussed in section 3.2. The communities of practice (COP) theory will be presented in section 3.3, while issues of trust are briefly discussed in section 3.4.

Chapter 4 provides an overview of the methodological approach followed in this thesis. It describes the research process, including choice of research area, data collection, and analysis.

Chapter 5 presents the first part of the empirical findings and analysis. Section 5.1 provides an overview of the evolution of the Yahoo boys communities. Section 5.2 details the entry into the COP on the basis of the concept of *legitimate peripheral participation*. In section 5.3, the 14 characteristics of a COP as proposed by Wenger (1998, pp. 125-126) will be compared to the Yahoo boys characteristics of organization. Finally, research question 1 is discussed in section 5.4

Chapter 6 presents the second part of the empirical findings and analysis. Section 6.1 details the skills found among the Yahoo boys. Section 6.2 is concerned with how these skills are shared within the COP. Section 6.3 outlines how the Yahoo boys utilize external skills, knowledge and tools. Lastly, research question 2 is discussed in section 6.4.

Chapter 7 presents the third part of the empirical findings and analysis. In section 7.1, Yahoo Yahoo is presented as a set of innovations. Section 7.2 details how innovation has taken place in Internet auction and credit card fraud. Section 7.3 is concerned with Nigerian letter and advance fee fraud, while section 7.4 focuses on Internet dating and romance fraud. Finally, research question 3 is discussed in section 7.5.

Chapter 8 presents a summary of the three specific questions and discusses the overarching research question in order to tie the thesis together. Section 8.3 discusses the implications and limitations of the thesis, and provides thoughts on further research. Section 8.4 contains a short contemplation on the future of Yahoo Yahoo.



## 2 Contextual framework

Due to the lack of prior research, some of the empirical data gathered during the interviews conducted in Nigeria is featured prominently in certain sections of chapter 2. This does perhaps deviate somewhat from the regular composition of a master's thesis, where the empirical data is presented in its own chapter. My approach was necessary in order to (I) enhance the readability and flow of the thesis, and (II) provide an adequate contextual background on a phenomenon that is mostly unexplored. Further empirical data concerning the research questions will be presented in chapters 5, 6 and 7.<sup>1</sup>

### 2.1 Nigeria

The Federal Republic of Nigeria is a West-African country bordering Benin in the west, Niger in the north, and Chad and Cameroon in the east. Due to its estimated population of 170 million, the country is also known as “The giant of Africa.” Three main ethno-linguistic groups account for the majority of the population: The Hausa-Fulani of the northern savannas (29%), the Yoruba in the southwest (21%) and the Igbo in the southeast (18%) (CIA, 2012). An additional 200 smaller ethno-linguistic groups and over 250 indigenous languages exist in the country (CIA, 2012; Falola & Heaton, 2008, p. 4). Nigeria's population is further divided into Sunni Muslims (50%), Christians (40%) and practitioners of indigenous religions (10%), with the north being predominantly Muslim and the south predominantly Christian (Campbell, 2011; CIA, 2012; Falola and Heaton, 2008, p. 4).

Ethnic, cultural and religious legacies that date back hundreds, and sometimes thousands of years, still affect present-day Nigeria's culture, politics and economy (J. Campbell, 2011; Cunliffe-Jones, 2010; Falola & Heaton, 2008; Maier, 2000; Mbeke-Ekanem, 2000; Peel, 2009; Smith, 2007). Thus, many of the developments that have led to the phenomena that will be studied in this thesis can be traced back long before Nigeria became an independent country. However, due to the scope of the research, section 2.1.1 will begin in the 1960's, only briefly covering the pre-colonial and colonial era of the Nigeria region. The subsequent sections will primarily highlight developments in Nigeria's history that later in this thesis will be argued to be an important factor for the eventual rise of the Yahoo Yahoo.<sup>2</sup>

---

<sup>1</sup> See section 4.3 for a presentation of the informants.

<sup>2</sup> Falola & Heaton (2008) provide a good starting point for readers who wish to immerse themselves deeper into the history of the Nigeria region.

### **2.1.1 A nation divided**

On October 1st, 1960, Nigeria became a fully sovereign state in the British Commonwealth (Campbell, 2011, p. 5). Although it was a day of celebration, most Nigerians did actually not see themselves as “Nigerians” at all. Obafemi Awolowo – the respected youth leader active during the independence period – famously cautioned that Nigeria was a “mere geographical expression” (as cited in Campbell, 2011, p. 28). When the British government officially amalgamated the Nigeria region into a colony in 1914, they brought together ethnic groups that traditionally had belonged to various kingdoms, caliphates and tribes (Campbell, 2011, p. 3). Rather than working on bringing the population of its colony together, the British mainly did the opposite. In the southern and eastern regions, the British invested in infrastructure and allowed Christian missionaries to construct schools. The northern Muslim Hausa-Fulani region, on the other hand, was mainly governed through indirect rule, receiving little attention from the colonial administration. Thus, in the years prior to independence, northern political leaders became increasingly aware of their economic, educational and technological underdevelopment. The tensions and political power plays between the three main ethnic groups were significant, and even continue to shape the political sphere of present-day Nigeria (Campbell, 2011; Falola and Heaton, 2008).

In spite of the numerous challenges facing the young nation, the general outlook was optimistic. Oil had been discovered in the Niger delta region in 1958, promising wealth and prosperity. Many believed Nigeria would soon claim a central position in African and world affairs (J. Campbell, 2011). Nigerian artists, musicians and writers worked hard to create a national culture in order to bring the ethnic groups together (Falola & Heaton, 2008, p. 160-163). In spite of the positive developments, Nigeria’s First Republic only lasted until January 1966, when the military took power. The “five majors” of the coup claimed their mission was to extort the blatant corruption, economic mismanagement, “tribalism”<sup>3</sup> and election fraud that had plagued the country since its independence (Falola & Heaton, 2008, pp. 172-173).

On the 24<sup>th</sup> of May 1966, the federal system was officially abolished and replaced with a unitary system where more power was to be transferred to the center in order to avoid regionalism. The northerners, who had the majority vote in the federal system, found this unacceptable. On July 29, 1966, a group of northern officers lead by Colonel Yakubu Gowon, carried out a counter coup (Falola and Heaton, 2008, pp. 172-175).

---

<sup>3</sup> In this case the word tribalism is meant to describe the regional division of Nigeria, which caused the three major ethnic groups to constantly fight for power.

The subsequent turmoil led to the Eastern Region declaring itself independent on May 30, 1967. It was now known as the Independent Republic of Biafra. The Nigerian-Biafran war broke out, lasting until January 12, 1970. Between one and three million people lost their lives, leaving a terrible legacy for Nigeria (Falola and Heaton, 2008, pp. 174-180).

### **2.1.2 Oil – A blessing and a curse**

In the 1970s, oil became Nigeria's chief export, making it the wealthiest country in Africa at the time. Although this led to investments in infrastructure and public services such as education, the financial gains from the oil exports were to be both a blessing and a curse. Oil drilling created vast environmental problems in the Niger delta. Revenues from the petroleum sector were distributed unequally, mainly benefiting those in power. From 1972 to 1984, oil exports as a share of total exports ranged between 82% and 99% (Ayadi et al., 2000, p. 332). In practice, Nigeria had become a rentier state. The military dictatorship was dependent on the oil revenue from foreign corporations, while becoming increasingly disconnected from its population. According to Falola and Heaton (2008) this is "... a disconnection that continues to afflict Nigeria" (p. 181). The notion of the government being unable to – and perhaps even unwilling to – provide for the population also seemed to be shared among the youths I talked to during my field work in Nigeria, and will be further discussed in section 2.2.3.

During the 1970s, a sharp increase in "kickback schemes" was observed. In these schemes, government officials would reward friends and business partners with government contracts or licenses. In return they would receive a small percentage, or a "kickback." Not surprisingly, most of the schemes were connected to the booming oil industry. These forms of corruption were officially condemned by Colonel Gowon, the military ruler at the time, but in effect his administration proved to be just as corrupt as the regimes before it (J. Campbell, 2011; Falola & Heaton, 2008; Smith, 2007).

On July 30, 1975, Colonel Musa Yar'adua removed Gowon from power in a bloodless coup. General Murtala Mohammed was chosen as the new head of state. He immediately went to work on his three goals: Fighting corruption in the government, promoting "national unity," and laying the foundation for democratic rule. Considered an honest man, the general expectations were high. Unfortunately, he was assassinated only six months later in yet another coup. Lieutenant General Olusegun Obasanjo took over, stating he would follow the plans laid out by Mohammed (Falola and Heaton, 2008, pp. 181-199).

While unable to fight corruption and unify the country, Obasanjo did transfer power to a democratically elected government in 1979. However, The Second Republic was not able to

provide the “national” governance the new constitution had outlined. Patronage networks were as strong as ever, and the kickback schemes made it even worse. During the second oil shock in April 1980, a record-breaking price of 103,76 USD<sup>4</sup> per barrel of oil was observed (Mouawad, 2008). Shortly after, prices began to fall drastically. Public servants were not paid for several months, a problem which has continued to plague government employees ever since (Falola and Heaton, 2008, p. 204). Multiple strikes and demonstrations followed. Many turned to religion. The Islamic north was increasingly lobbying for shari’a laws to be included at the federal level, further increasing tensions between Muslims and Christians. The election of 1983 was perceived to have been undeniably rigged. An electoral tribune eventually overturned the results. Believing military rule was needed once again, Major General Muhammadu Buhari installed himself as head of state on December 31, 1983 (Campbell, 2011, p. 7; Falola & Heaton, 2008, pp. 199-208).

### **2.1.3 Military coups and the rise of 419**

From 1983 to 1999, three military regimes ruled Nigeria: Those of Major General Muhammadu Buhari (1983-1985), General Ibrahim Badamasi Badangida (1985-1993), and General Sani Abacha (1993-1998) (J. Campbell, 2011; Falola & Heaton, 2008; Maier, 2000). In 1986, Badangida approved a Structural Adjustment Program that resulted in the already troubled economy sliding further down. During 1988 to 1995, the inflation rate ranged between 40% and 70% (Falola & Heaton, 2008, pp. 217-219). Poverty was widespread. Those in power, on the other hand, increased their wealth. It is believed that Abacha and his family robbed the state of 3 billion USD. The governor of the central bank was found to have thirty-seven homes and millions of dollars in foreign currency (Falola and Heaton, 2008, p. 234). Professor Festus Iyayi of the University of Benin (as cited in Ogunmade, 2013) estimated that between 1960 and 1999, the Nigerian elite embezzled around 400 to 600 billion USD from the treasury.

By the 1980s, approximately 50% of Nigeria’s 100 million inhabitants were under the age of 15 years old (Smith, 2007, p. 30). At this point of time, young Nigerians were probably the most educated and ambitious in the country’s history. Even though the country was facing numerous challenges, expectations for employment and a better life were high. However, the harsh economic climate and rampant corruption of the government resulted in major frustration among the young population. Many were forced to turn to corruption and bribe

---

<sup>4</sup> In 2008 USD, adjusted for inflation. The original price was 39,50 USD a barrel (Mouawad, 2008).

taking themselves. Smuggling, armed robbery and fraudulent schemes also became more widespread (Smith, 2007, pp. 28-33). The perhaps most prominent symbol of the connection between government corruption and its dispersion into the Nigerian society was “419.” The term – which first surfaced in the early 1980s – takes its name from chapter 38 §419 of the Nigerian criminal code that deals with a specific type of fraud (Federal Bureau of Investigation, n.d.; Interpol, n.d.; Smith, 2007, pp. 19-24).

Originally, 419 was associated with advance fee fraud (Apter, 2005, pp. 226-236; Falola & Heaton, 2008; Smith, 2007, pp. 19-24).<sup>5</sup> Advance fee schemes are likely to have been conducted for hundreds or thousands of years. Quite certainly they have been around in Nigeria since before independence.<sup>6</sup> Still, it was in the 1980s that the combination of blatant government corruption and a frustrated population caused the situation to escalate. In order to dupe victims from Western countries, perpetrators leveraged Nigeria’s international reputation as a notoriously corrupt nation with large oil reserves. Through the use of letters, fax and telephone, victims were persuaded to advance sums of money with the promise of massive returns from oil-related funds that had been embezzled by the perpetrator. These schemes often mimicked genuine cases of corruption that had been uncovered in Nigeria during the 1970s and 1980s (Falola & Heaton, 2008, pp. 240-241; Smith, 2007).

Some international agencies and internal Nigerian critics have suggested that the military regimes not only served as an inspiration to the 419 schemes, but that they even facilitated them (Smith, 2007, p. 30). During the Babangida administration (1985-1993), an effort was made to expand international fax and telephone services. So-called “business centers” flourished throughout the country, especially in the Lagos area. While services included word processing and photocopying, most Nigerians believed the main purpose was to conduct 419 through the use of international phone and fax services. In spite of the infrastructure expansion initiated by Babangida, by 2001, only half a million phone lines existed for a population of well over 100 million. Due to the scarcity and cost of obtaining a phone line, many thus believed that top officials of the National Telephone Company

---

<sup>5</sup> Advance fee fraud relies on the victim being persuaded to advance a sum of money in order to reap a significant financial return in the future (Chang, 2008; Federal Bureau of Investigation, n.d.). See section 2.3.2 for more information.

<sup>6</sup> E.g. the first Nigerian scam letter sent to Norway that Økokrim (The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime) is aware of dates back to 1957 (Dybo, personal communication, October 30, 2012).

(NITEL) collaborated with high-level government officials to sell sought-after phone lines to the highest bidders. Those who were able to afford a phone line were usually fraudsters involved in 419 (Smith, 2007, pp. 30-31). When General Sani Abacha took over power in 1993, he made the promise of stamping out corruption. In the mid 1990s, he ordered the closing down of all business centers. However, Smith (2007) noted that “it is not clear what effect Abacha’s crackdown on business centers had on the level of scam activity in the mid-1990s” (p. 31). What is certain is that 419 and advance fee fraud did not suffer a fatal blow. Rather, 419 was to expand massively during the next years through the use of the Internet.

Over time, the term 419 evolved into covering basically “... any behavior that relies on dissimulation, illusion, or some other manipulation of the truth in order to facilitate gain or advantage” (Smith, 2007, p. 20). This does not only apply to high-profile political or economic fraud, but also schemes such as selling other peoples houses (some houses in Nigeria are painted with the message “this house is not for sale” in order to avoid this) or stopping cars at intersections and telling them that something is wrong with the engine (so that they can be paid to fix the “problem”). In fact, the term 419 can even be applied when someone is cheating in a love affair. For most people living outside of Nigeria, 419 is generally linked to advance fee email fraud. However, it is important to note that 419 not only affected (and affects) foreigners, but that the amount of 419 conducted within Nigeria is likely to be of the same or even greater magnitude (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Smith, 2007). The issue of 419 will be further discussed in section 2.2.1.

#### **2.1.4 Transition to democracy and present-day Nigeria**

After sixteen years of military rule, a transition to democracy was initiated. In early 1999, elections were held for state assemblies, governorships, the National Assembly, and the presidency. The elections were relatively peaceful, but accusations of electoral fraud were put forward by all parties. Former head of state Lieutenant General Olusegun Obasanjo won the presidential election (Falola & Heaton, 2008, pp. 234-235). He was re-elected in 2003, defeating the former military dictator Muhammadu Buhari in yet another controversial election.

In September 2009, President Goodluck Jonathan (at the time vice president) outlined the draft document for *Vision 20:2020*. The document contained plans for job creation, renewable energy, and perhaps gaining most attention; that Nigeria would be one of the 20 largest economies in the world by 2020 (Nigeria High Commission, 2009). Although GNI per



capita increased from 1320 USD to 2420 USD between 2003 and 2012 (World Bank Group, 2012), the former Governor of the Nigeria Central Bank, Professor Chukwuma Soludo, was highly doubtful about the feasibility of Vision 20:2020 at a conference in 2010 (as cited in Elombah, 2010). In May 2013, the Minister of National Planning, Dr. Shamsudeen Usman, announced that *Vision 20:2020* had been modified to *Vision 25:2020* due to difficulties in reaching the previous goal set in 2009 (Olukotun, 2013).

Other indicators such as life expectancy at birth have seen little improvement, standing at 52 years in 2011 (ibid.). Ethnic and religious conflicts have escalated during the last few years, with several suicide attacks and bombings gaining international media attention (BBC, 2011, 2012a, 2012b; Okeowo, 2013). Although Nigeria is moving in a positive direction in some areas, the challenges ahead are significant. For the Nigerian youth, there seem to be few positive changes to drive them away from Internet fraud and other forms of 419 that are prevalent in the country (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12, 2012).

## **2.2 The Yahoo boys**

The rise of the Yahoo boys is strongly interrelated with the introduction of the Internet. The first Internet<sup>7</sup> connection to Nigeria was installed in 1995 through the UNESCO-sponsored Regional Informatics Networks for Africa (Internet eXchange Point of Nigeria, n.d.). Proliferation of access was slow in the initial years due to the Abacha administration's self-proclaimed efforts to eradicate 419. After the transition to democracy in 1999, Internet and cellular phone technology became more prevalent in Nigerian society (Smith, 2007, p. 31). In 2002, an estimated 350 000 Nigerians had access to a mobile phone (Falola & Heaton, 2008, p. 236). By June 2013, there were approximately 120 million active mobile phone subscribers in the country (The Nigerian Communications Commission, 2013). According to Informant 4

---

<sup>7</sup> The Internet is "a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols" (Oxford University Press, 2013). In everyday speech, "using the Internet" entails various undertakings such as browsing the web, sending emails, listening to music and watching videos. Technically, these are different services that all run through the Internet infrastructure. The most common Internet services are SMTP (email), HTTP (World Wide Web), HTTPS (Secure World Wide Web), FTP (File Transfer Protocol), VoIP (IP telephony) and SSH (Secure Shell) (Gralla, 1998; Leiner et al., 2009; Shuler, 2002). Although technically inaccurate, I will in this thesis use the broad sense of the word Internet due to its widespread adoption and in order to avoid unnecessary confusion.

“... Internet came in late 90s. 98, 99, the year 2000” (personal communication, December 14, 2012). At that time, Yahoo! – an American multinational Internet corporation known for its search engine, web portal and email service – was the global market leader (CrunchBase, n.d.; Seodotcom, 2011; Wall, 2013). Due to Yahoo! being the main Internet service provider in Nigeria for years, “Yahoo” became a Nigerian slang word for the Internet. Informant 2 explained that “in Nigeria the illiterates, they refer to Internet, anything online, Internet as Yahoo. You want to go and browse, you want to go and Yahoo. Everything Yahoo” (personal communication, December 1, 2012). The ensuing increase in Nigerian Internet fraud led to “Yahoo” and “Yahoo Yahoo” becoming terms for Internet fraud, while those that conducted these types of fraud became known as “Yahoo boys” (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 4, personal communication, December 14, 2012).

### **2.2.1 On the origins**

In section 2.1.3, I outlined the connection between the political and economic environment of Nigeria and the rise of 419. In this section I will present a discussion of how the early 419 schemes most likely contributed to the rise of the Yahoo boys subculture. As previously mentioned, 419 was initially conducted through the use of letters, fax and telephone. These methods of defrauding foreigners required both financing and the right contacts in order to obtain international telephone and fax services. This meant that it was mostly well-endowed Nigerians who could conduct fraud internationally (Informant 1, personal communication, November 30, 2012). Anne Dybo (personal communication, October 30, 2012) – a consultant with 16 years of experience at Økokrim (The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime) – noted that in the beginning of her career, bag-loads of letters originating from Nigeria were confiscated by the Norwegian postal service. However, in the late 1990s, the amount of letters confiscated decreased considerably. In turn a notable increase of email fraud was observed (ibid.). US-based National Consumers League (NCL) witnessed the same trend. In 1997, the NCL received 1152 complaints about Internet fraud. The year after, the number had increased to 7500 (as cited in Chang, 2008, p. 74). For Nigerian youths, defrauding foreigners had until the late 1990s been out of their scope. When the Internet was introduced, all of that was about to change (Informant 5, personal communication, December 14, 2012).

A striking feature of the initial advance fee fraud emails that were sent out of Nigeria is that they utilized basically the same schemes as those previously employed in the letters,

faxes and telephone calls from the 1970s to late 1990s. It could thus be easy to conclude that those individuals that were involved in that type of 419 eventually turned into the Yahoo boys. However, informant 1 (personal communication, November 30, 2012) disagreed. He argued that although the schemes in the letters and emails often shared similarities, they were "... not the same set of people." In Informant 1's opinion, it is imperative to distinguish between the people and the methods:

The people that write letters and do stuff like that are, they are the ones that do it on the very big scale. ... There is no doubt that there has to be some kind of connection between both parties because it propagated down from those ones. But it is not the same [people] (personal communication, November 30, 2012).

The term "big scale" is in this instance not only used to describe the amount of letters and subsequently emails, but also the targets and resources involved in the scams. For example, Smith (2007, pp. 1-4) tells the story of a Texas oil executive – who through an elaborate scam that included a visit to Nigeria – was defrauded of hundreds of thousands of dollars. The youths who began conducting email fraud were according to Informant 1 doing it on the "small scale" (personal communication, November 30, 2012). By this he meant that "... people that are doing it on the small scale, they target ordinary people, you know ordinary Americans, ordinary Europeans" (ibid.).

The individuals who used to conduct 419 through letters, telephone and fax were thus in the opinion of Informant 1 (ibid.) not the same individuals that turned into the Yahoo boys. He provided a different explanation for the origins of Yahoo Yahoo in the early 1990s:

Yahoo started with children of really wealthy people in Europe and Nigeria, and they just wanted to have fun, they wanted extra money to go to the club. You know, go to clubs, spend thousand pounds, spend thousand pounds, live lavish, that was the foundation of it. ... Gradually with time when they go to club they always have people following them, and this followers, people they call them boys you know ... (personal communication, November 30, 2012).

Informant 1 (ibid.) thus described a process where wealthy Nigerians sent their children to study in Europe. While studying in Europe, these Nigerian youths began conducting fraud on a leisurely level in order to attain funds for partying and buying luxury items. Their early

schemes usually involved credit card fraud – so-called *woike*.<sup>8</sup> When these youths returned to Nigeria after the completion of their studies, they continued their schemes, eventually diffusing both their methods and other characteristics such as a flamboyant lifestyle and strong group connection to the poorer youths. It was probably at this point that the problem of Yahoo Yahoo began to escalate. Informant 1 explained:

But now you have this generation of boys that came in from behind them, you know, learnt it from them, and they don't have any other sources of living, so they are very ferocious about it, and very aggressive and determined to the profession, and that's what turned it into a crisis (personal communication, November 30, 2012).

Informant 5 mostly agreed: "That form of it credit card scam ... I can see it coming from people that traveled and coming back" (personal communication, December 14, 2012). Informant 4 (personal communication, December 14, 2012) was neither able to confirm nor dismiss the claims of Informant 1. However, he expressed what in his view happened after the introduction of the Internet to Nigeria, took place:

When the Internet was coming in, the government tried all their possible best to make sure that an average Nigerian is computerly trained, knows one or two things about Internet. That is why you see all these ICTs<sup>9</sup>. It's government intervention. They don't mean any harm to anybody. ... And now, 2000, 2001, that was when the thing really hit these parts of the world. Because then computer systems started coming in from the US, from UK, from Europe, all over the world, fairly used. Just to help Africa to get into that global thing ... So these boys sit at an avenue. Internet cafes were everywhere. They go to cafes; they do a lot of things. ... And the level of poverty in Nigeria then, because Nigeria has been governed by military administrator. They were suffering and saw that as an avenue to wealth. ... And when they started it wasn't money straight. When they started it they buy goods. ... Then they were not doing it as a source of living. It was a freelance attitude. ... I want to buy this, I want to pay that, I will pay you next week. They send the goods down – they don't pay. ... That was how the whole thing started. So, it was when some boys discovered that see, there is money in this thing. Some people now made it their daily source of living, they now make it as their livelihood. (Informant 4, personal communication, December 14, 2012)

---

<sup>8</sup> In the Yoruba language 'wo' means drag and 'ike' means plastic (Informant 1, personal communication, November 30, 2012).

<sup>9</sup> Information and communications technology.

Many of the Yahoo boys' scam methods and schemes that will be detailed in section 2.3 are clearly inspired by earlier 419 scams that were conducted long before the introduction of the Internet. It is therefore reasonable to assume that there is a certain connection. The lifestyle and group mentality of the youths described by Informant 1 (personal communication, November 30, 2012), however, fits well with the characteristics of the current generation that will be outlined in section 2.2.2. Additionally, the underlying reasons and motives, which will be discussed in section 2.2.3, seem to have impacted the Yahoo boys in numerous ways. My findings thus indicate that the current form of Yahoo Yahoo and today's generation of Yahoo boys are the result of complex interactions between factors stemming from Nigeria's political, cultural and economic history, the former 419 scams conducted through the use of letters, fax and telephone, and the children of wealthy Nigerians who went to study in Europe.

Today, Yahoo Yahoo has become such a regular part of Nigerian society for most youths that whether Yahoo Yahoo originated in one way or another does not seem to receive much thought. Informant 3 – a student in his late teens or early twenties – explained:

Actually the start I don't really know much about it because it's not something that is new. It probably started even before I was born. So I don't know the original, but what I know is as I was growing up, as we knew computers, we knew what they called Yahoo Yahoo. And we knew that we had access to it and we knew we could do it. So that just it (personal communication, December 12, 2012).

### **2.2.2 Characteristics**

Although no comprehensive studies on the "typical" Nigerian Yahoo boy exist, some previous research has been conducted. Aransiola & Asindemade (2011) carried out interviews with forty Yahoo boys in Ile-Ife, southwestern Nigeria. They found that 50% of the respondents were between the age of 22 and 25, while another 40% were between 26 and 29. Ninety-five percent of the respondents were undergraduate university students and 95% were men. It should be noted that this study is not statistically representative. Further, the respondents were approached by undergraduate research assistants who knew which of their classmates were Yahoo boys. This has arguably affected the percentage of students among the respondents.

Aghatise (2006) reported that 80% of Internet fraud perpetrators were students in higher educational institutions. However, no source or method for acquiring this number was provided. Ibrahim (2006, as cited in Ojekodum & Eraye, 2012) argued that most Yahoo boys are between the age of 18 and 30, and that they are either enrolled in university or about to be

admitted to university. Smith (2007) also noted that "... most of [the Yahoo boys] have some secondary school or university education ..." (p. 29). Adeniran (2008) did not provide any specific numbers, but reported that "out-of-school students (due to distortions in school calendar) and unemployed youths constitute a considerable percentage of the *yahooboy*s in Nigeria" (original emphasis) (p. 369). Ojo Melvin Agunbiade, a Nigerian sociologist and informant for this thesis explained:

They [Yahoo boys] are more based in communities where there are universities. I think that also creates an avenue for them to share information, to also get information from, to also get themselves initiated into the business that some of them would call it, or game. Then maybe after they have become a master on, I mean they have also acquired the mastery of the practice, they may want to now relocate (personal communication, December 14, 2012).

Informant 3 agreed: "The highest percentage it comes from universities. I'm sure you get it. Because you can actually have, can gather a kind of group of people together" (personal communication, December 12, 2012).

Both the informants interviewed and the previous research studied (Adeniran, 2008; Aransiola & Asindemade, 2011; Ojekodum & Eraye, 2012; Tade & Aliyu, 2011) suggested that Yahoo boys are recognizable by their outward appearance and behavior. Aransiola & Asindemade (2011) provided the following description of how to identify Yahoo boys:

The Yahoo boys usually brag, sag, do things loudly, drive flashy cars, and change cars frequently. They turn their music loud and wear expensive and latest clothes and jewelry. They also have a special way of dressing and relate, they spend lavishly, love material things, and go to clubs. They are prominent at night parties picking prostitutes at night. They also move in groups of two, three, and four when going to eateries. They speak different coded languages and use coded words such as "Mugun," "Maga," and "Maga don pay," which all means "the fool has paid" (p. 760).

Agunbiade (personal communication, December 14, 2012), Informant 1 (personal communication, November 30, 2012), Informant 2 (personal communication, December 1, 2012), Informant 4 (personal communication, December 14, 2012), Adeniran (2008), Aransiola & Asindemade (2011), and Tade & Aliyu (2011) all mentioned that women also are involved in Yahoo Yahoo. However, my findings indicate that the women that are involved in Yahoo Yahoo usually are the girlfriends or female acquaintances of Yahoo boys. Women often specialize in one part of the fraud, such as conversing on the phone or via webcam with

potential victims of Internet dating and romance fraud. More research is needed in order to estimate the number of women who conduct Internet fraud independently.

In this section I have argued that the typical Yahoo boy is an 18-30 year old male university student. It is important to note that the previous research studied and my own research was mainly conducted at or near a university. Although most Yahoo boys being university students sound plausible due to both the educational possibilities and social avenue a university provides, it is quite probable that a sizeable population of non-university-attending Yahoo boys also exists.

### **2.2.3 Underlying reasons and motives**

It appears that there are two main reasons for why Nigerian youths become Yahoo boys. The first is the combination of unemployment and poverty. The second is peer group influence. Additional underlying reasons are believed to be: (I) Nigeria's political, cultural and economic history (Aluko, 2006; J. Campbell, 2011; Falola & Heaton, 2008; Smith, 2007; Tade & Aliyu, 2011). (II) The relative acceptance of Yahoo Yahoo in Nigerian society (Tade & Aliyu, 2011; Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 4, personal communication, December 14, 2012). (III) The anonymity and distance from the victims the Internet provides (Adomi & Igun, 2008; Informant 1, personal communication, November 30, 2012). (IV) The minor chances of being arrested by the police (Glickman, 2005; Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Tade & Aliyu, 2011).

#### **Unemployment and poverty**

Between 1960 and 2004, the poverty rate of Nigeria increased from 15% to 54,4% (Tade & Aliyu, 2011, p. 869). By 2010, an estimated 70% of the population lived below the poverty line (CIA, 2012). The unemployment rate stood at 23,9% in 2011 (ibid.), but increases to over 50% if youths only are counted (RISE Networks, 2013). The fear of unemployment was mentioned by Adeniran (2008), Adomi & Igun (2008), and Tade & Aliyu (2011) as an important factor leading to the growth of Yahoo Yahoo. Informant 3 agreed:

... We have thousands of graduates that graduate every year that can't get jobs and most of these graduates are scattered everywhere. Some go into hard labor, some go into all kinds of things. Percentage of them into Yahoo Yahoo. Cause they have the minds and everything and so they can (personal communication, December 12, 2012).

Informant 2 offered a similar view:

... unemployment is increasing, poverty is increasing ... Despite the fact that there's a lot of money, oil, everything and all that. But things are getting worse ... You see, at the end of the day they are now finishing after five years, six years and all that. You know, no job, no nothing. What do you expect? (personal communication, December 1, 2012).

In regards to poverty, the picture is less clear. First, the concept of poverty itself is ambiguous. Should a person be considered poor if she or he falls under the World Bank's poverty line (Thomas, 2000)? Or should Townsend's (1979) notion of relative poverty be used instead? Where does the threshold between being poor and not being poor stand? A study that focuses more extensively on the poverty aspect of Yahoo Yahoo would have to address these issues more thoroughly.<sup>10</sup> It is quite certain that poverty is a substantial motivation for some, but informants disagreed on how significantly it affects the motivations of the Yahoo boys in general. Informant 1 provided his view:

No doubt poverty is a contributing factor, but poverty is not the underlying reason for them to do the crime. Now with the average Yahoo boy, now you know it's not about poverty, but it's this culture of living large, living lavishly ... Because of the culture, because of the way it came down, because it was from the boys who wanted to go to the clubs and transferred to those who were close, and down and down and down, it's this culture where most of the people who go after the business, are people that want to live lavishly and be known as big boys in society. ... It's about the mentality, not poverty (personal communication, November 30, 2012).

Informant 2 (personal communication, December 1, 2012), Informant 3 (personal communication, December 12, 2012), and Informant 4 (personal communication, December 14, 2012) all mentioned poverty as one of the factors. However, "living lavishly" seemed to be a more central motivation than simply escaping poverty. Tade & Aliyu (2011) noted that "senior secondary school students' involvement in Internet crime is not a function of the socio-economic status of their parents, as students from both rich and poor homes engage in the crime" (p. 863). Further, their research shows that a noticeable percentage of students involved in Yahoo Yahoo are the children of rich and highly influential people in society (Tade & Aliyu, 2011, p. 869).

---

<sup>10</sup> I have in my thesis used the informants' definition of poverty. They described someone as poor if the person is struggling to survive and lacks most or all basic commodities.



### **Peer group influence**

Informant 2 explained the reasoning of many Yahoo boys as “my friend has this, I want to get it as well. My friend is doing this, I want to do it as well. My friend has achieved this, I want to do it as well” (personal communication, December 1, 2012) . This statement also resonates with Tade & Aliyu's (2011) research. Gaining respect from their peers, attracting the opposite sex and living lavishly seem to be major goals for many Yahoo boys. Considering their age group, this behavior is perhaps not surprising when other aspects of their lives and the society around them are taken into account. Even if a young person is not already in a group of Yahoo boys, the youth culture around him could be of influence. Popular Nigerian hip-hop songs such as “Maga don Pay” and “Operation” all glorify the Yahoo boys’ lifestyles (Zulu, 2008). Music videos produced by artists such as Olu Maintain and Kelly Hansome show them driving expensive cars, drinking champagne, partying with young women and displaying large amounts of cash money amassed by conducting Internet fraud. The general themes in both the lyrics and the music videos are the positive benefits that being a Yahoo boy bring.

However, not only friends and youth culture influence the Yahoo boys. Agunbiade (personal communication, December 14, 2012) explained that the family is an important part of the Yoruba culture. Ensuring that the immediate and extended family is doing well is of great importance. Informant 2 (personal communication, December 1, 2012) noted that there at times can be intense pressure from the family to bring home funds, especially if other boys in the neighborhood are supporting their families. Informant 2 explained:

... parents pressure, you know, some parents will call you: ‘Look. Look at your friend that you went to secondary school together. He just bought a new car for his mom, his mother. You my son, what are you doing? What are you using your head to do? Are you not a man? I’m getting old, when am I going to reap the fruit of my labor? Go and find something to do!’ ‘Ah, mommy, that guy, he is doing shady things now. Things that are no good.’ ‘See, eh. Just I’m not saying you should do bad thing oh. But go and make fortune, indirectly.’ You know? (personal communication, December 1, 2012).

It should be noted that while some families accept that their children or relatives are involved in Yahoo Yahoo, they could be less of a norm. The above statement should thus not be read as clear evidence.

### **Acceptance of Yahoo Yahoo in society**

Decades of corruption, poverty and unemployment have created an acceptance of Yahoo Yahoo in at least some parts of the population. Wealth is celebrated, questions of how it was

amassed are seldom asked (Tade & Aliyu, 2011, p. 871). In some cases, Yahoo boys are perceived as legitimate businesspersons and/or persons who are able to pay a premium for goods and services (Nhan, Kinkade, & Burns, 2009). Informant 1 explained:

A woman that sells rice by the side of the road that sells it normally for fifty naira a plate. You know, she sees a Yahoo boy come in and sells it to him for five hundred naira. That's why it's socially acceptable that he is a Yahoo boy. You know a person that sells a part, a vehicle part that sells for five hundred normally, sells it for ten thousand. That's socially acceptable. A house, an apartment will be rented for a thousand naira normally, somebody comes and rents it for ten thousand naira because he has cash lavishly. To the person renting the house it's socially acceptable. And that's what settled it (personal communication, November 30, 2012).

Informant 1 further argued that the result of the rampant corruption and numerous scandals is that Nigerians have embraced a “free for all” attitude. In fact, fraud is not only affecting foreigners: “... half the time our fight is against theft. In terms of time it's half of what we go through. If the world is shouting that some westerners are being defrauded, they have to see what we go through” (personal communication, November 30, 2012). Informant 1 claimed that not only is Yahoo Yahoo accepted; some even believe it would be unwise not to engage in it. He explained his reasoning with a Yoruba proverb: “... a person who sees an opportunity to fool you and doesn't fool you is a fool. And a person that they attempt to fool and allows himself to be fooled is a fool” (personal communication, November 30, 2012). Informant 2 offered his view on the acceptance of Yahoo Yahoo:

... every youth, as in young people, are craving to be like them. They like them. And the old people, few of them, they got no choice, they like them. But if I just want to, you know, give them figures, you know, the old people I will say like half of them, you know, still tolerate it. And the youth, you know, more than eighty percent, you know, they like it (personal communication, December 1, 2012).

One statement on this issue is clearly not enough to draw a conclusion. Still, there seems to be – although often denied publicly – a general acceptance of conducting Internet fraud by at least some section of the population. In fact, individuals involved in other types of crime often claim they are Yahoo boys since it is more acceptable (Adeniran, 2008; Agunbiade, personal communication, December 14, 2012; Informant 1, personal communication, November 30, 2012; Ojekodum & Eraye, 2012; Tade & Aliyu, 2011). Informant 4 commented that “they don't agree with them if they are affecting the citizens of the nation. Do you understand? But

if I have nothing to do with me, the sky's the limit, go ahead!" (personal communication, December 14, 2012).

### **Blaming the victims**

Nigerian actor and comedian Nkem Owoh sings the following in the song "I Go Chop Your Dollar":

419 no be thief, it's just a game. Everybody they play them. If anybody fall mugu,<sup>11</sup> ha! My brother I go chop them. ... That Oyinbo<sup>12</sup> people greedy, I say them greedy. I don't see them tire. That's why when they fall into my trap o! I they show them fire.

It is important to note that "I Go Chop Your Dollar" originally was written as the title track for the Nigerian comedy film *The Master*, which condemned 419 scams and ridiculed the government corruption of the prior decades (Libbenga, 2007).<sup>13</sup> While the song originally was meant to criticize 419, it does at the same time present the reasoning of some Yahoo boys; that the victim is just as guilty as them. This notion gained international attention when the Nigerian high commissioner in 2008 stated that "people who send their money are as guilty as those who are asking them to send the money" (as cited in Moses, 2008). This sense of the foreigners being greedy was also shared by Informant 4 who argued:

The truth about this thing is that most of the people that falls victim, most of the foreign people, Americans, UK, US people that fall victim are greedy. ... If you don't work somewhere you cannot get anything from that end. And somebody just send you a mail, oh see, I have a hundred thousand dollar in my bank account, I couldn't cash it, please help me with ten thousand so that I can send a rate of thousands with you. The white man himself is a thief, because he has been greedy! ... Although there are some that have been talked to, convinced sort of, those ones are different. But some of them too are greedy (personal communication, December 14, 2012).

By passing some of the blame to the victims, the Yahoo boys thus seem to further legitimate their actions.

---

<sup>11</sup> Directly translated, mugu (or maga) means fool or idiot. The term is usually employed to describe the victim of fraud.

<sup>12</sup> A Yoruba word for a white man.

<sup>13</sup> In fact, the movie was subsequently banned by both the Economic and Financial Crimes Commission (EFCC) and the Nigerian Broadcasting Commission (NBC) (NigeriaMovies.net, 2007).

### **Getting back at the colonial powers**

Another form of legitimization of their actions is the Yahoo boys' self-proclaimed goal of wanting to "get back" at the former colonial powers. Informant 3 mentioned that "thinking of the history of Nigeria we have actually been cheated a lot. Now, a lot of us don't say this, but we actually feel very cheated" (personal communication, December 12, 2012). Informant 4 explained further:

... they have this mentality that it is these same white people that enslave us in the 18<sup>th</sup> century, that took us as slaves from Nigeria to Europe. So they believe now is the payback time. It's like they are hitting back on them. That is what they believe. That oh, you took my father for a slave, I'm going to deal with you (personal communication, December 14, 2012).

Although some Yahoo boys stated that they want to get back at the former colonial powers, Agunbiade commented that "... when you look at the practice itself, it's not as if it's just been targeted at westerners or foreigners alone" (personal communication, December 14, 2012). This is a view that was shared by several informants. They argued that perpetrators cause at least the same amount of damage domestically than internationally, thus finding the reasoning of "getting back at the whites" to be puzzling. Informant 5 (personal communication, December 14, 2012) actually called it more of an excuse. The same view was offered by Informant 2 who noted:

... they only use that to clear their conscience. ... Nobody will wake up in the morning and decide that, oh, like now, ok, these British they have really stolen from Nigeria. I need to steal from them again. Now buy laptop, start stealing. It doesn't make any sense (personal communication, December 1, 2012).

### **Lack of consequences and law enforcement**

The last underlying reason to be discussed is the slim chance of being caught. Although some arrests have been made (Ojekodum & Eraye, 2012, p. 1002), Yahoo boys are generally not worried about the police (Nhan et al., 2009; Smith, 2007; Tade & Aliyu, 2011). Informant 2 agreed: "In Nigeria they are not really afraid, because they know money settles it all. ... You hardly see a Yahoo boy in prison" (personal communication, December 1, 2012). Informant 5 argued that "you will see some police where they encouraging them because they get a cut from there" (personal communication, December 14, 2012). Informant 4 explained further:

They [Yahoo boys] collect money, they give some percentage to the police. 'Ok worker police, never you come to my house again, take hundred thousand naira.' They won't come. Even if I kill a person,

they won't come. Or that judge, you are the chief judge of this state, ok. 'Let me give you a check of one million naira. If they bring any case to your table, please discard it.' Then he has a freewheel. That is what is happening in Nigeria (personal communication, December 14, 2012).

In addition to the lack of law enforcement, the distance between the perpetrators and the victims means that they often are ignorant of the consequences of their crimes (Grabosky, 2004; Nhan et al., 2009). E.g. Informant 4 argued that "... once they defraud somebody oversea, nobody question them for that money. So they believe it is free money" (personal communication, December 14, 2012).

#### **2.2.4 Summary**

This section has provided an overview of the key motives that affect young Nigerians who enter Yahoo Yahoo. Although the Yahoo boys are believed to consist primarily of young students, they range from being the children of wealthy and powerful individuals, to having been born into seemingly endless poverty. For some, conducting Yahoo Yahoo is a way of survival. For others, it could simply be the result of boredom or bolstering one's own ego. As Informant 3 argued, "... some do it just for fun" (personal communication, December 12, 2012). However, the corruption, economic mismanagement and policies of the past are likely to have affected them all. E.g. Informant 5 argued that "those generations have died, but they have embodied it into Nigeria" (personal communication, December 14, 2012). Thus, the Yahoo boys could perhaps be more of a homogeneous group than perceived at first glance, at least in the sense of being united through the practice of Yahoo Yahoo.

### **2.3 Internet fraud**

The US Department of Justice defines Internet fraud as:

... any type of fraud scheme that uses one or more components of the internet, such as chat rooms, e-mail, message boards, or web sites to present fraudulent solicitation to prospective victims, to conduct fraudulent transactions, or to transmit the proceeds of fraud to financial institutions or to others connected with the scheme. (As cited in Chang, 2008, p. 71).

In prior research, the term Internet fraud is sometimes used interchangeably with cybercrime (Adomi & Igun, 2008; Aransiola & Asindemade, 2011; Ehimen & Bola, 2010; Ribadu, 2007; Tade & Aliyu, 2011). In its broadest sense, cybercrime encompasses a variety of criminal aspects, ranging from email fraud and hacking, to stock market manipulation, corporate

espionage and even terrorist activities (Gordon & Ford, 2006; Symantec, n.d.-a). However, definitions of cybercrime vary and mostly depend upon the purpose of using the term (UNODC, 2013). Although the types of criminal activities that are studied in this thesis fall into the category of cybercrime, the more narrow definition of Internet fraud will be used in order to provide a more specific analysis. It should be noted that due to discrepancies in the literature, terms such as online fraud, electronic fraud, e-fraud, digital fraud, cyber fraud, and computer fraud are in this thesis viewed as synonymous with Internet fraud.

### **2.3.1 The financial impact of Internet fraud**

In this section I will provide an overview of the global financial impact of Internet fraud. As will be discussed below, the illegal nature and complexity of Internet fraud creates major challenges in compiling reliable data. Further, victims are often not inclined to report the crimes, thus creating additional complications. Finally, the statistics that are available usually cover cybercrime or Internet crime in general, not Internet fraud specifically, and should thus be read with some scrutiny.

In 2011, the direct financial costs of global cybercrime were calculated to 114 billion USD by computer and information security firm Symantec (2011). If the additional expenses of lost time by the 431 million adult victims are included, the costs increased to 388 billion USD (ibid.). However, estimates of the total cost of global cybercrime range from 300 billion to 1 trillion USD (Lewis & Baker, 2013, p. 5). To illustrate the scale of cybercrime, Symantec (2011) noted that “cybercrime costs the world significantly more than the global black market in marijuana, cocaine and heroin combined (\$288 billion). In 2012, 110 billion USD were lost in direct financial costs, down 4 billion USD from 2011. However, the number of victims increased to 556 million, up 125 million from the year before (Symantec, 2012).

It should be noted that these statistics cover cybercrime in general, and thus include other types of crime in addition to Internet fraud. Symantec (2012) reports that 42% of the direct financial costs of cybercrime could be traced back to fraud. If we assume that all these instances of fraud fall within the category of Internet fraud as defined in section 2.3, the global direct financial impact of Internet fraud in 2012 could thus have been 46,2 billion USD.

The Internet Crime Complaint Center (IC3) is a partnership between the Federal Bureau of Investigation (FBI) and the National White Collar Crime Center (NW3C) (Internet Crime Complaint Center, n.d.). In 2010, the IC3 received 303 809 complaints about Internet crime (Internet Crime Complaint Center, 2010, p. 5). Of these, over 50% were connected to

schemes the Yahoo boys employ, such as advance fee fraud, non-delivery payment/merchandise, auction fraud, and credit card fraud (ibid. p. 9). The top three countries perpetrators originated from were the US (65,9%), the UK (10,4%) and Nigeria (5,8%) (ibid. p. 11). However, there are several reasons why these statistics deserve certain scrutiny if they are to be used to provide a picture of the global situation of Internet fraud.

First, the IC3 is based in the US. Hence, the origin of the perpetrators could have a connection to the fact that 91,2% of the complaints were sent from the US. Victims of Internet fraud could perhaps believe that it would make more sense to report fraud that originated domestically rather than abroad. Additionally, fraudsters often hide their real location by the use of tools such as IP bouncers (Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12, 2012; Informant 4, personal communication, December 14, 2012; Rege, 2009). However, it should also be noted that individuals from other countries often pose to be Nigerians or assist the Yahoo boys (Basil Udotai, as cited in *The Economist*, 2012). Thus, the percentage of Internet fraud perpetrators originating from Nigeria could also be less than the 5,8% provided above.

Second, the UNODC (2013, p. 7) noted that the proportion of victims of cybercrime who reported the crime to the police ranged upward from one percent. A global private service sector survey suggested that 80% of individual victims of core cybercrime did not report the crime to the authorities (ibid.). The Federal Bureau of Investigation (2010) noted that while it is almost impossible to know how many victims do not report fraud, the number was believed to be “substantial”. Both Dybo (personal communication, October 30, 2012) and the Federal Bureau of Investigation (2010) mentioned reasons for non-reporting to be shame, the fear of being prosecuted due to involved in illegal activity, and the unwillingness to accept having been defrauded. Thus, since such a small percentage of victims report being victims of Internet fraud, official statistics most likely do not provide an accurate picture of the size and impact of Internet fraud.

Rather than producing statistics based on complaints, the numbers provided by Symantec (2011; 2012) are the result of surveys. For example, the previously mentioned financial cost of 114 billion USD from 2011 is an extrapolation based on the survey of 12 704 adults from 24 countries. Symantec (2011) noted that “the margin of error for the total sample of adults (n=12,704) is + 0.87% at the 95% level of confidence. The global data has been weighted to ensure all countries have equal representation: adults to n500.” However, while the survey has been conducted in an acceptable manner, the previously mentioned factors of

shame, fear of being involved in illegal activity, and not acknowledging having been scammed, could perhaps have contributed to the victims' survey answers. Nonetheless, surveys are probably the most reliable tools available to measure Internet fraud at the moment.

Due to the rapid expansion and development of computer and mobile technology (Carter, 2013; Pawlik, 2013), the size and impact of Internet fraud is likely to grow further. One of the future challenges is the increasing use of mobile phones to access the Internet. Symantec (2012) reported that four out of five men between the ages of 18 and 31 who access the Internet on their mobile phone have fallen prey to cybercrime in their lifetime. During my travel to Nigeria, the hip-hop artist Olamide had just released his latest album. Its title "Yahoo Boy No Laptop" suggests that the Yahoo boys are no longer required to utilize a computer to conduct Internet fraud. A mobile phone is all they need. Seemingly, the perpetrators are already at the forefront of technology.

### **2.3.2 Types of Internet fraud**

Nhan, Kinkade, & Burns (2009) noted that "... present research suggests social engineering, or manipulation of people, is the most important part of online fraud" (p. 456). This also seems to apply to the Yahoo boys – who based on previous research in the literature and information from my interviews – prefer social engineering to more technical methods such as hacking. Even among competent hackers, social engineering appears to be viewed as a powerful tool (Honan, 2012; Long & Mitnick, 2008; Mitnick & Simon, 2002; Workman, 2007). The recent hacking of the Twitter accounts belonging to the Associated Press and The Onion (Onion Inc.'s Tech Team, 2013; Pepitone, 2013), and the security flaws exposed at Apple, Amazon and Google (Honan, 2012; Kingsley-Hughes, 2012) proved that apparently hacker-proof systems could be cracked with well-established social engineering methods found in Internet fraud. This demonstrates that although victims of Internet fraud often find themselves ridiculed for their apparent naivety, the level of sophistication of Internet fraud methods has in many cases moved well beyond the "classic" email fraud.

In the next sections I will present some of the most common schemes and methods utilized by the Yahoo boys. Although I have separated Internet fraud into different types and categories, the divisions are not always clear. The dynamic and creative nature of Internet fraud results in various methods being incorporated into combinations that are likely to continually evolve in the coming years (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal



communication, December 12, 2012, Informant 4, personal communication, December 14, 2012; Nhan et al., 2009).

### **Internet auction and non-delivery fraud**

This type of fraud is believed to have been one of the first methods of Internet fraud employed by the Yahoo boys. This was briefly discussed in section 2.2.1 where Informant 4 stated that “when they started they buy goods ... Talk to one eBay guy, I want to buy this, I want to pay that, I will pay you next week. They send the goods down, they don’t pay” (personal communication, December 14, 2012).

The most common methods are failure to deliver goods that the buyer has paid for and nonpayment for delivered goods. Other schemes include adding hidden charges, buying goods with a stolen credit card, and selling black market goods. In 2008, non-delivery made up 32,9% of the total complaints received by the Internet Crime Complaint Center (2008, p. 4), while auction fraud made up 25,5%.<sup>14</sup> By 2012, Internet auction and non-delivery fraud had decreased from the 2008 level, most likely due to improved mechanisms for payment transfer and added security by popular Internet auctioning sites such as eBay (Internet Crime Complaint Center, 2011, 2012). My interviews also pointed towards Internet auctioning and non-delivery fraud receiving less attention from the Yahoo boys during the last few years.<sup>15</sup>

### **Advance fee fraud**

In its simplest form, advance fee fraud relies on the victim being persuaded to advance a sum of money in order to reap a significant financial return in the future (Chang, 2008; Federal Bureau of Investigation, n.d.). A central objective for the perpetrator is to obtain the trust of the victim. This is usually achieved by presenting oneself as an important businessperson, politician, bank officer, lawyer, military officer or doctor (Chang, 2008; Glickman, 2005; Holt & Graves, 2007; Nhan et al., 2009; Ribadu, 2007). The narratives provided in instances of advance fee fraud are almost limitless. Typically the schemes fall into the categories of investment offers, lottery winnings, or “found money” (Federal Bureau of Investigation, n.d.).

Through the analysis of 476 unsolicited emails, Nhan et al. (2009) found that advance fee fraud perpetrators often appeal to human greed. In addition to providing an incentive for

---

<sup>14</sup> In this instance non-delivery and auction fraud have been separated, but non-delivery can also be said to be a part of auction fraud.

<sup>15</sup> It should be noted that this type of Internet fraud is likely to be just as popular with perpetrators who are residents of the respective countries, rather than being a “trademark” of the Yahoo boys.

the victim to comply with the fraudulent scheme, this brings at least two further benefits for the perpetrator: (I) Potential moral qualms faced by the perpetrator are reduced since the “victims are greedy” (Informant 4, personal communication, December 14, 2012; Moses, 2008). (II) The victim is in some cases of advance fee fraud technically involved in an illegal operation such as corruption or money laundering. The victim is thus reluctant to report being scammed due to the previously mentioned issues of shame and/or fear of being prosecuted.<sup>16</sup>

Internet-based advance fee fraud has traditionally been distributed to victims through unsolicited bulk emails (also known as email spam). According to Lee (2011), email spam accounted for 90% of all email traffic in July 2010. Although Kaspersky Lab (2011) estimated that fraudulent emails only made up 2% of email spam (the bulk is advertising and sale of products), this still means that hundreds of millions of fraudulent emails were distributed every day. By June 2011, email spam had declined to 72,9% of all email traffic (Lee, 2011). The reasons could be numerous – including the dismantling of major botnets<sup>17</sup>.

However, the decline in email spam could also be connected to the general dispersion of Internet fraud away from the traditional email format. Several of my informants mentioned the increasing use of social networking websites among the Yahoo boys as a current trend. This is in line with a recent report by IT security firm Sophos (2013), which indicated that fraud on social networks such as Facebook and Twitter is on the rise. Hence, the amount of advance fee fraud is most likely not decreasing, but migrating from email to social networking websites. In addition, Internet dating and romance fraud is also likely to move perpetrators away from advance fee email fraud (Dybo, personal communication, October 30, 2012; Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12, 2012; Informant 4, personal communication, December 14, 2012).

### **Nigerian letter/419 fraud**

The term “Nigerian letter” derives from the previously mentioned fraudulent letters that were sent out of Nigeria prior to the introduction of the Internet, which again are thought to have

---

<sup>16</sup> Dybo (personal communication, October 30, 2012) noted that in 2002, a Norwegian victim of Internet fraud was convicted in a Norwegian court of law for involvement in an advance fee fraud scheme originating from Nigeria. However, Dybo (ibid.) added that at least for Norway the cases of victims being prosecuted are rare.

<sup>17</sup> According to Symantec (n.d.-b) “[botnets] allow hackers to take control of many computers at a time, and turn them into “zombie” computers, which operate as part of a powerful “botnet” to spread viruses, generate spam, and commit other types of online crime and fraud.”

been inspired by actual cases of government corruption. 419 has already been discussed in section 2.1.3. In this instance, 419 refers to Internet fraud specifically, not the wider meaning of the term.

Nigerian letter fraud is very similar to advance fee fraud. In everyday speech the terms advance fee fraud, Nigerian letter and 419 fraud are often used synonymously. Similar to advance fee fraud, a number of Nigerian letter fraud schemes exploit emotions such as compassion and/or pity. Examples include pretending to be a representative from an NGO, or a Nigerian widow who has lost her husband in a tragic accident. In some instances these schemes incorporate a religious element in order to prove the perpetrators honesty and/or to appeal to the victim. However, greed is probably the emotion most perpetrators wish to trigger in their victims. Thus, the “classic” Nigerian letter fraud is of the civil officer, lawyer or businessperson proposing an offer the victim is unable to refuse. Provided below is an abbreviated example of a typical Nigerian letter scam.<sup>18</sup>

Dear Sir ,

I am Dr. Benard Ukah, the financial Controller and Contract Award Committee Chairman in the National Electric Power Authority (NEPA) in Lagos, Nigeria. My colleagues have assigned me to seek for assistance of a reliable foreigner through whom we can transfer the sum of US \$35,500,000.00 (Thirty Five Million, five hundred Thousand U.S Dollars) which arose from deliberate over- inflated contract value for the General Expansion of the Kanji Dam Thermal Station on behalf of National Electric Power Authority (NEPA) for increased energy generation to Nigeria and some other West African Countries.

The Contract was awarded in 1999 during the late General Sanni Abacha regime to an expatriate firm with the consideration of 10% commission agreement on the total contract value. The contract has been completed and the contractor has long been paid, we are now left with this US\$35,500,000.00 representing the 10% our own share as agreed presently in the Federal Government account.

---

<sup>18</sup> For more examples see e.g. the Bureau of International Narcotics and Law Enforcement Affairs (1997), Smith (2007), U.S. Department of State (2007), and websites such as 419Eater.com, 419Baiter.com and Scamorama.com.

... We have agreed that after the transfer of the money into your account, you shall be entitled to 20% of the total amount transferred, while 70% will be for us and the remaining 10% will take care of any incidental expenses that emanates from this transaction.

... Please note that this business is strictly confidential and must not be disclosed to a third party. This is necessary to avoid disclosure that may jeopardize the transaction. Finally, if this proposal is acceptable to you or if you have any questions, feel free to contact me on the above E-mail address. You should also send to me your private telephone /fax numbers and E-mail address for easy and confidential communication. I will oblige you with further information if so required ... (419Eater.com, 2005)

Nigeria's strongly perceived connection to fraud leads to the question why perpetrators would ever claim to reside in the country. Tool such as IP bouncers make it relatively easy to appear to be located in another country with a less tarnished reputation. Although the above example was rather well-written, a further characteristic of the Nigerian letter fraud is the incorrect grammar, misspelling of words and extensive use of capital letters. A common question that arises is thus if it would not make more sense for the perpetrators to spend more effort on crafting a believable email?

In an analysis of Nigerian letter fraud, Herley (2012) pointed to the issue of true and false positives. Herley (2012) noted that "in deciding who to attack true positives are targets successfully attacked, while false positives are those that are attacked but yield nothing" (p. 1). A challenge for the perpetrators is thus to lure the most gullible into replying, while making it obvious to the rest that it is a scam. If the perpetrator must spend a significant amount of time exchanging emails – or even phone calls – with victims who after some time understand they are being duped, the profits of the perpetrator would dwindle. Based on his analysis, Herley (2012) thus argued:

Since gullibility is unobservable, the best strategy is to get those who possess this quality to self-identify. An email with tales of fabulous amounts of money and West African corruption will strike all but the most gullible as bizarre. It will be recognized and ignored by anyone who has been using the Internet long enough to have seen it several times. ... Those who remain are the scammers ideal targets. They represent a tiny subset of the overall population (p. 11).

Basil Udotai – the former cybersecurity director at the office of Nigeria's National Security Adviser – argued that "there are more non-Nigerian scammers claiming [to be] Nigerian than ever reported. Even when Nigerians relocate to other West African countries they retain the

Nigerian status, addresses and operational bases in their e-mails for competitive reasons” (as cited in *The Economist*, 2012). The aspects of the Nigerian letter fraud that at first thought seem to be the least profitable in terms of generating revenue from fraud, are thus in fact likely to be a deliberate strategy of at least some percentage of the perpetrators.

### **Internet dating and romance fraud**

This type of fraud involves the feigning of friendship, romantic interest and/or expressions of marriage intentions in order to extract money from the victim (Bureau of Consular Affairs, 2013). In my interviews, Internet dating (also known as online dating) was regarded as a relatively easy and usually highly lucrative type of fraud. For example, Informant 3 stated that “the level now is the dating. The dating now is easier. Just join this site and you start” (personal communication, December 12, 2012).

Although males make up most of the perpetrators, they often have female acquaintances that talk to victims on the phone or via webcam through services such as Skype. This is done in order to convince the victim of the authenticity of the woman they are corresponding with. However, the Yahoo boys do not only pose as Nigerian women, but also as identities ranging from Nigerian NGO workers to US soldiers in Afghanistan. According to the Internet Crime Complaint Center (2012, p. 16), women in the age groups 30-39 and 50 and over, as well as men between 40 and 59 years old were the main targets. However, these statistics are based on complaints only. As argued in section 2.3.1, these figures might not provide an accurate representation of the demographics of the victims.<sup>19</sup>

The challenge of finding accurate statistics also applies to the financial losses due to Internet dating and romance fraud. Dybo (personal communication, October 30, 2012) noted that all the cases of Internet fraud in Norway that had been reported to Økokrim that far in 2012, had originated as an Internet dating or romance scam (the financial losses amounted to approximately 200 million NOK). The Internet Crime Complaint Center (2012) received 4467 complaints in 2012, which amounted to more than 55 million USD. According to Psychological Science in the Public Interest (as cited in National White Collar Crime Center, 2013), nearly 25 million people used Internet dating sites in 2011. Added to this number could be romance fraud that originates through social networking websites such as Facebook. The increase in Internet dating and romance scams led the Federal Bureau of Investigation

---

<sup>19</sup> These particular statistics do fit quite well with the information obtained in the interviews. However, my interviews do not constitute a representable sample of the population, and can thus not be used to verify the statistics in question.

(2013) to publish a warning about this type of fraud on valentines day 2013. Based on the above discussion, it is reasonable to assume that Internet dating scams are becoming a major part of Internet fraud.

In a similar manner to advance fee fraud, Internet dating and romance fraud requires the perpetrator to gain the trust of the victim. This is achieved by making the victim fall in love with the perpetrator over a period of several weeks or months. During this time, the perpetrator does usually not ask for money. In fact, it is in some cases the perpetrator who sends small gifts to the victim. Once the perpetrator is certain that the victim has fallen in love, the next phase is entered. A common attribute for the countless schemes that follow is that the perpetrator repeatedly experiences bad luck, disastrous circumstances, or finds him or herself in a situation where money is urgently needed. This can be anything ranging from the American businessman who was robbed on a trip to a foreign country and needs the victim to send him emergency funds, to the Nigerian woman who is ready to fly to Europe to marry the man of her dreams. On the way to the airport she will be involved in a car accident. The victim, having built up anticipation of the love of his life arriving at the airport will be heartbroken when she does not arrive. A week later he will receive an email from a doctor informing him that she is in a coma. What follows is a series of requests for money from the hospital, lawyers and any other reason the perpetrators can convince the victim to transfer money for.

Informant 4 (personal communication, December 14, 2012) provided an example of a typical method the Yahoo boys use:

There is one thing they call commitment fee. What do I mean by commitment fee is that by the time you give me even if it's just ten bucks, you are committed. Do you understand? If I met you online today, maybe on Facebook, on any of these sites, whatever. The first one hour I would be very enterprising. I would talk to you what I do for a living, my likes, my dislikes, bla, bla, bla. Do you understand? You get carried away. I will send you many pictures. And check this out; all of a sudden I just tell you oh, 'please, sorry, I need to go to the theatre [operating room] now. One of my patients is dying, I need to quickly attend to her.' You understand you are surprised ah, all of the sudden. So you will be wondering, you want to ask more questions ah, oh, 'I have already told you what I'm doing, I'm not a doctor.' Now oh, why theatre? So you say ok, you have a child organization in Nigeria and one of the boys that is staying with you was injured, something, something, bla, bla, bla, maybe there is a crack house or something. So the boy is dying, the boy is in a hospital. They want to do an operation on him.

But as you are talking you need seven hundred dollar to operate on this guy, but currently you have only five hundred dollar with you. 'Can you quickly send two hundred dollars so that I can balance?' And on the spot you will be sending your pictures of the guy coming to the theatre, he has the prepared pictures for that. 'Oh, and hold on, let me just take a picture of the guy. He is going to the theatre now so that you can see.' Already has the pictures, he has some funny, funny edited pictures with him. You just quickly upload one, send to you. But then you see that you are confused because at that time nobody to advise you that that thing is fraud. Sure you get it. And you have a plain mind, and oh, the next twenty minutes he will tell you the boy is in the theatre, he will even show you the picture that they started operating on him. You will be confused. The next thing, if you have a hundred bucks with you, you will just send a hundred down. You are committed.

As demonstrated above, perpetrators use techniques to make the victim send money out of pity, sympathy or own interest (for example by sending money for a new phone or webcam so that they can communicate better). This has the effect of the perpetrator not having to explicitly ask for money and prolongs the eventual suspicion of the victim. At one point, most victims will realize that they have been duped and end contact with the perpetrator. Several months later a person claiming to be a Nigerian police officer or judge will contact the victim, who is informed that there has been a raid on a house owned by a Yahoo boy. The funds have been recovered from the perpetrators account, and can be wire transferred to the victim for a fee, which covers various legal documents. Most victims pay the fee – which is quite minor compared to the total amount of funds sent – with the hopes of getting their money back. Naturally, it was the last link in the chain of scams the victim has fallen for.

Due to the emotions involved in Internet dating and romance fraud it is difficult to combat the problem effectively. The saying of “love turning blind” does in fact make quite some sense in connection to this type of fraud, and was mentioned by Informant 3 (personal communication, December 12, 2012) as one of the reasons for the increase in Internet dating and romance fraud.

## **Summary**

The above sections have outlined some of the most common types of fraud employed by the Yahoo boys. However, there exist numerous other types of Internet fraud that the Yahoo boys

employ (although rather seldom). These methods are included in the table below, which summarizes the most common types of Internet fraud.<sup>20</sup>

Method	Description
Internet auction and non-delivery fraud	<ul style="list-style-type: none"> <li>• The purchase of items without sending payment or purchasing items with a stolen credit card.</li> <li>• The sale of items where payment is collected in advance, but the product or service is subsequently not delivered.</li> </ul>
Advance fee fraud	<ul style="list-style-type: none"> <li>• Usually involves persuading the victim to advance a sum of money in order to reap a significant financial return.</li> </ul>
Nigerian letter/419 fraud	<ul style="list-style-type: none"> <li>• Basically advance fee fraud that has seen strong adaptation to the local Nigerian context. Has subsequently branched out into numerous themes and variations.</li> </ul>
Internet dating and romance fraud	<ul style="list-style-type: none"> <li>• Involves the feigning of friendship, romantic interest and/or expressions of marriage intentions in order to extract money from the victim. Has become very popular among the Yahoo boys in recent years.</li> </ul>
Phishing	<ul style="list-style-type: none"> <li>• Requires an authentic-looking website to be set up in order to collect personal information such as credit card details or the social security number of the victim. The victims are usually directed to the phishing website via email or social networking websites. This method is not believed to be widespread among the Yahoo boys.</li> </ul>
Pharming	<ul style="list-style-type: none"> <li>• Similar to phishing, but involves hijacking the domain name server of an authentic website in order to re-direct web traffic to a fraudulent website. Due to technical difficulties, this method is even rarer among the Yahoo boys than phishing.</li> </ul>
Hacking	<ul style="list-style-type: none"> <li>• A diverse method that can include the hacking of the victim's email in order to reset passwords for Internet banking or similar services. If hacking is required, it is usually outsourced, as few Yahoo boys possess the necessary skills and knowledge.</li> </ul>

**Table 2.1: The most common Internet fraud methods among the Yahoo boys**

Sources: (Bureau of Consular Affairs, 2013; Federal Bureau of Investigation, n.d.; Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12, 2012; Informant 4, personal communication, December 14, 2012; Interpol, n.d.).

<sup>20</sup> While it is out of the scope of this thesis to cover all types of Internet fraud, see e.g. the Federal Bureau of Investigation (n.d.) for an overview.



### 3 Conceptual framework

This chapter presents the conceptual framework for the subsequent analysis of the empirical data I collected in Nigeria. In section 3.1, innovation will be defined and briefly discussed. Section 3.2 examines the concept of knowledge and provides a rationale for the epistemological starting point. Section 3.3 explores the community of practice literature, which is based on the epistemology of practice outlined in the previous section. Finally, section 3.4 provides a short discussion on trust and how it affects communities.

#### 3.1 Innovation

Defining *innovation* usually involves separating it from the term *invention*. According to Fagerberg (2005), “invention is the first occurrence of an idea for a new product or process, while innovation is the first attempt to carry it out in practice” (p. 4). The influential Austrian economist Joseph Schumpeter distinguished between five types of innovations: New products, new methods of production, new sources of supply, the exploitation of new markets, and new ways to organize business (Fagerberg, 2005, pp. 6–7; Schumpeter, 1942, p. 84). Another way to classify innovations is by using the terms *product innovation* and *process innovation* (Fagerberg, 2005, pp. 5–6). In addition, many important innovations can be categorized as *organizational innovations*, which Edquist, Hommen, & McKelvey (2001) suggested further dividing into *technological process innovations* and *organizational process innovations*.

Another approach of classifying innovation – also based on Schumpeter’s work - is how radical it is compared to the present technology (Fagerberg, 2005, p. 7). *Incremental innovations* can be described as continuous improvements of products or processes that usually do not arise out of planned R&D efforts. *Radical innovations*, on the other hand, are mainly the result of deliberate R&D efforts and present a radical new product or process that leads to the emergence of new industries (Freeman and Soete, 1997, as cited in Fagerberg, 2005, pp. 7–8).

A relevant discussion for this thesis is the issue of context. Fagerberg (2005) noted that “if A for the first time introduces a particular innovation in one context, while B later introduces the same innovation in another, would we characterize both as innovators?” (p. 8). A widely used practice following Schumpeter’s work is to use the term innovator for A and imitator for B. However, Fagerberg (2005) notes that following Schumpeter’s definition

would equally allow the term innovator to be used for B, since B is introducing the innovation in a new context for the first time. This distinction was also discussed by Levitt (2006), who argued:

Strictly defined, innovation occurs only when something is entirely new, having never been done before. A modest relaxation of this definition may be allowed by suggesting that innovation also exists when something which may have been done elsewhere is for the first time done in a given industry. On the other hand, when other competitors in the same industry subsequently copy the innovator, even though it is something new for them; it is imitation (p. 2).

Although something is labeled an imitation in the strictest sense, this does not mean that the imitation cannot subsequently lead to new innovation(s). Fagerberg (2005) noted that “introducing something in a new context often implies considerable adaptation (and, hence, incremental innovation) and, as history has shown, organizational changes (or innovations) that may significantly increase productivity and competitiveness” (p. 8). The potential of imitations was also highlighted by Levitt (2006) who argued that “a simple look around us will, I think, quickly show that imitation is not only more abundant than innovation, but actually a much more prevalent road to business growth and profits” (p. 1).

As will be discussed in chapter 7, most of the Yahoo boys’ innovations cannot be considered to be something entirely new. However, the imitative behavior has in many instances included considerable adaptation to the local context and has definitely led to business growth and profits. I will in this thesis therefore employ a broad definition of innovation. However, only imitation that has required some sort of adaptation will be included as innovation. Otherwise, any use of e.g. technology or organization for the purpose of criminal activity could be labeled as innovation, which arguably would be too broad.

## **3.2 Knowledge**

Howells (2012) argued that “knowledge is a fundamental element in the process of innovation and economic development, although up until recently it has been largely ignored” (p. 1003). However, during the last two decades, the amount of research on knowledge in fields such as innovation studies and management studies has risen considerably. For example, a search on

Google Scholar for works published between 1990 and 2013 that included the words “innovation” and “knowledge management” returned over 1,1 million results (Google, n.d.).<sup>21</sup>

One of the first works within the field of management studies and organizational studies that received mainstream attention, was Nonaka & Takeuchi's (1995) book *The knowledge creating company: How Japanese companies create the dynamics of innovation*. The book subsequently received close to 30 000 citations – about the same number as Adam Smith's *Wealth of Nations* (Google, n.d.) – and for many an almost paradigmatic status (Gourlay, 2006). However, this does not mean that this is a homogeneous field of research. Instead, there are several different schools of thought based out of differing epistemological starting points about what knowledge constitutes and how it is shared (Newell, Robertson, Scarbrough, & Swan, 2009). In order to provide the reasons for my choice of theory and epistemological starting point for the subsequent analysis in chapters 5, 6 and 7, the concept of knowledge should first be further examined.

### **3.2.1 What is knowledge?**

The debate over what knowledge constitutes has been ongoing since the classical Greek period. In fact, an entire branch of philosophy – that of epistemology – discusses the nature, origin and scope of knowledge (Swan, 2008). Jashapara (2004) argued that “there is still no consensus on the nature of knowledge, except that it is based on perception that can provide a rational justification for it” (pp. 16-17). This perception is according to Jashapara (2004) based on our ontological and epistemological assumptions of reality, or the “glasses” we wear. Elaborating further on the discussion concerning knowledge in general is out of the scope of this thesis. I will instead try to present the aspects of knowledge that I believe are relevant to this thesis.<sup>22</sup>

Most scholars in fields such as innovation studies, organizational studies and knowledge management are based within one of two views on knowledge.<sup>23</sup> The first is the epistemology of possession (knowledge is something people have) and the second is the epistemology of practice (knowledge is something people do) (Cook & Brown, 1999; Newell

---

<sup>21</sup> This does not necessarily mean that all the results are focused on the topic of innovation and/or knowledge management, but it does show that there is an interest for issues connected to these terms.

<sup>22</sup> For a more comprehensive overview of the historical discussion of knowledge, see e.g. Jashapara (2004).

<sup>23</sup> I have chosen the two views presented by Newell et al. (2009). Others, such as Rowley (2007, p. 165), presents five different views: Philosophy-based, cognitive, network, community and quantum.

et al., 2009). Whether the two epistemologies are fundamentally opposing or could be complementary is not yet agreed upon (Swan, 2008).<sup>24</sup>

### **3.2.2 The epistemology of possession**

In the epistemology of possession, knowledge is considered a cognitive resource that improves effectiveness in the workplace by allowing people to “... understand where they are and make decisions about what to do next or to imagine the likely consequences of their actions” (Swan, 2008, p. 751). Considerable focus rests on the idea that knowledge can be extracted from social interactions and possessed (stored, shared and distributed) by individuals and organizations (Newell et al., 2009; Swan, 2008). In order to identify the different types of knowledge that individuals and groups possess, scholars such as Nonaka & Takeuchi (1995) have controversially drawn on Polanyi’s (1946, 1958, 1962, 1966, 1967) seminal works on the tacit dimension of knowledge and his dictum of “we can know more than we can tell.”<sup>25</sup>

Tacit knowledge can be described as skills or know-how that are developed through personal experiences in a specific context (for example riding a bicycle). It is difficult to formalize this type of knowledge due to its personal qualities (Ipe, 2003; Nonaka, 1994; Swan, 2008). Explicit knowledge, on the other hand, has been formalized (or codified) and can be shared across contexts through formats such as manuals and blueprints (for example a manual on how to assemble a bicycle) (Cook & Brown, 1999; Howells, 2002; Newell et al., 2009; Swan, 2008; von Hippel, 1994). Thus, the main differences between tacit and explicit knowledge lie in three different areas: (I) Codifiability and mechanisms for transferring knowledge, (II) methods for acquisition and accumulation, and (III) potential for aggregation and modes of appropriation (Lam, 2000, pp. 490–491).

The epistemology of possession does in many senses reflect a Cartesian view, by valuing the objective “truth” over subjective “opinion” (Swan, 2008). An emphasis is put on abstracting individual tacit knowledge from its social elements and codifying it for use in other parts of the organization or firm. Several frameworks have been constructed in order to

---

<sup>24</sup> Authors such as Cook & Brown (1999) have somewhat controversially attempted to bridge these two epistemologies (Newell et al., 2009).

<sup>25</sup> A number of scholars argue that Polanyi’s concept of tacit knowledge constitutes something quite different than how it is used in the epistemology of possession (Gourlay, 2006; Hildrum, 2009; Howells, 2002, 2012; Schmidt, 2012; Shapin, 2011). In fact, Schmidt (2012) argued that “many of his [Polanyi’s] readers, probably most, have misunderstood Polanyi’s notion of ‘tacit knowledge’” (p. 172).

explain what kinds of knowledge can be involved in knowledge work and how it is transferred. Prominent frameworks include the “SECI” model by Nonaka (1994), Spender's framework (1996, 1998) and Blackler's framework (1995).

However, there are a number theoretical objections to these structural frameworks (Bereiter, 2002; Essers & Schreinemakers, 1997; Gourlay, 2003, 2006; Hosking & Morley, 1991; McDermott, 1999; Schmidt, 2012; Tsoukas, 1996).<sup>26</sup> Additionally, there is evidence that knowledge management initiatives that are based solely on the structural frameworks often do not lead to the results hoped for (Newell, Scarbrough, & Swan, 2001; Walsham, 2002).

### **3.2.3 The epistemology of practice**

The premise for scholars in the epistemology of practice is that “‘knowledge’ is constructed and negotiated through social interaction” (Newell et al., 2009, p. 4). This means that “knowing is not a static embedded capability or stable disposition of actors, but rather an ongoing social accomplishment, constituted and reconstituted as actors engage the world in practice” (Orlikowski, 2002, p. 249). Scholars such as Cook & Brown (1999) and Suchman (1987) actually prefer to differentiate between knowledge and knowing (as a verb) in order to emphasize the active, process-based and social character of knowledge. Brown & Duguid (2001), Gherardi (2001), Lave & Wenger (1991), Nicolini, Gherardi, & Yanow (2003) and Orlikowski (2002) support the social aspects of knowledge with research on various social groups such as construction engineers, photocopy service technicians, radiologists, tailors, ship builders and alcoholics.

This emphasis on the social and practice aspects of knowledge and knowledge sharing also leads to a different view on knowledge itself. While Nonaka (1994, p. 15) quoted Plato's definition of knowledge as “justified true belief,” others such as Gourlay (2006) have pointed out that what is accepted as the truth results equally from negotiations among social actors as it does from any personally held beliefs (see also Alvesson & Kärreman, 2001; Newell et al., 2009; Schmidt, 2012). If Nonaka's (1994) presumption is used, an individual could be provided with a full explanation of something but still choose not to believe it. This leads Newell et al. (2009) to conclude that “... knowledge – or claims to knowledge – are social as

---

<sup>26</sup> For example, although we could know if knowledge is tacit or explicit, and individual or collective, this does not necessarily help us in understanding where it comes from or how to use it (Newell et al., 2009; Pfeffer & Sutton, 2000).

well as individual and depend heavily on the organizational and cultural context in which such claims are made” (p. 5).

The two main perspectives within the epistemology of practice are process perspectives and practice perspectives.<sup>27</sup> I will in this thesis focus on practice perspectives. Cook & Brown (1999) defined a practice as “*the coordinated activities of individuals and groups in doing their “real work” as it is informed by a particular organizational or group context*” (original emphasis) (pp. 386–387). The practice perspective emphasizes that knowledge is inseparably connected to practice. Knowledge flows where practice is shared, while it “sticks” where practice is not shared (Newell et al., 2009, p. 15).

There are three main aspects of the practice perspective that are especially relevant for this thesis: (I) The stickiness of knowledge creates difficulties in sharing knowledge where the practices of individuals are not shared (Brown & Duguid, 2001; Carlile, 2004). (II) Material objects are not only tools, but establish the possibilities and limits of what practices are possible. The design and properties of on-human artefacts, object and physical arrangements thus both influence human activity and are a result of it (Orlikowski, 2007; Swan, 2008). (III) Investment of knowledge in practices matter. Establishing practices takes time, and they are thus difficult to change (Carlile, 2002).

### **3.2.4 Choice of epistemological starting point**

Based on the above discussion and the nature of the empirical data collected in Nigeria, I concluded that a practice perspective would provide the best foundation for the subsequent analysis. As will be discussed in chapters 5, 6 and 7, my interviews revealed that most Yahoo boys have little interest in codifying tacit knowledge into explicit knowledge. Instead, the social and community aspects were highlighted as important arenas for recruitment, knowledge sharing, and innovation. Treating knowledge as something inherently found within the mind of individuals would thus not enable me to highlight what I believe are the most interesting findings.

Knowledge will be defined as “... the ability to discriminate within and across contexts” (Swan, 2008, p. 751), which borrows from Tsoukas & Vladimirou's (2001) definition of knowledge as “*the individual ability to draw distinctions within a collective*

---

<sup>27</sup> These perspectives share several similarities. Both see knowledge (or knowing) as a social activity, and view process, context and purpose as important characteristics. A more thorough overview of the similarities and differences can be found in Newell et al. (2009).

*domain of action, based on an appreciation of context or theory, or both*” (original emphasis) (p. 979). This broad definition of knowledge allows for the inclusion of both the individual cognitive aspects of knowledge, the social aspects, and the role of material artefacts. Although I am using the practice perspective as a foundation, I do not completely rule out the ideas found in the epistemology of possession. In order to highlight the tacit and practice-based dimension of knowledge, I have also included the term *skills* in the questions and subsequent analysis. Skills will be defined widely to include terms such as *knowledge*, *expertise* and *ability*.<sup>28</sup>

Scholars such as Alvesson & Kärreman (2001, pp. 997–999) might object that employing such a broad definition of knowledge covers “everything and nothing” (ibid., p. 998). However, my goal with this thesis is to describe a previously unexplored phenomenon. I am thus employing an approach that enables me to present a more holistic picture of the findings outside the boundaries that following one specific framework would allow me to do.

### 3.3 Communities of practice

The term *community of practice* (COP) was coined in the book *Situated Learning: Legitimate Peripheral Participation* by Lave & Wenger (1991). Their theory was founded on five ethnographic studies of traditional apprenticeship institutions. Lave & Wenger (1991) pointed to a *triadic* group relation between *masters*, *young masters* (or *journeymen*) and *apprentices* (or *novices*) (p. 56). Within a COP, two ends of a continuum of membership were said to exist. On the one end was the master; an expert within the community who had evolved his or her identity and meaning-making to fit with the COP. On the other end of the continuum was the apprentice, who existed as a legitimate peripheral participant (M. Campbell, Verenikina, & Herrington, 2009, p. 649; Lave & Wenger, 1991). While newcomers had to learn from more experienced members of the community, they also had to contribute to the work of the group (Fox, 2000). This process from peripheral outsider to full insider was termed *legitimate peripheral participation* (Lave & Wenger, 1991, p. 51; Murillo, 2011).

Lave & Wenger (1991) provided no formal definition of a COP. Their study thus focused more extensively on the interplay between learning and socialization, rather than on the community itself (Contu, 2008; Murillo, 2011; Newell et al., 2009). Two important implications for the understanding of knowledge work were suggested: (I) Knowledge and

---

<sup>28</sup> An example of the use of the term is that the Yahoo boys possess computer skills, which builds on several types of knowledge.

learning are intimately connected with social practices. (II) Knowledge work is frequently shaped and influenced by the wider communities individuals learn through (Lave & Wenger, 1991; Newell et al., 2009).

Orr's (1990) ethnography of Xerox photocopier service technicians – although not based on the COP theory – is still widely regarded as the earliest ethnography of a COP (Raelin, 1997; Brown & Dugid, 2001; Teigland, 2003; all as cited in Murillo, 2011). In his study, Orr (1990) provided “thick” description of the service technicians’ work processes. One of the main findings was that they exchanged stories, experiences and problem-solving tips through informal meetings over breakfast, lunch and coffee. This proved to be a much more important arena for learning, training and exchanging ideas than the corporation’s manuals and training courses.

Brown & Duguid (1991) were the first to build on the two above works. They combined Orr's (1990) specific insights (which they referred to as *canonical practice*), with Lave & Wenger's (1991) practice-based theory of learning as legitimate peripheral participation, and Daft & Weick's (1984) “... interpretive account of ‘enacting’ organizations to place innovation in the context of changes in a community's ‘way of seeing’ or ‘interpretive view’” (as cited in Brown & Duguid, 1991, p. 41). By combining the three above theories, Brown & Duguid (1991) argued that “...through their constant adapting to changing membership and changing circumstances, evolving communities-of-practice are significant sites of innovating” (p. 41).<sup>29</sup>

In 1998, Wenger proposed a framework that was a substantial theoretical development of Lave & Wenger's work from 1991. Murillo (2011) pointed to three elements that Wenger used to join the concepts of community and practice into a unitary construct: (I) Mutual engagement, (II) a joint enterprise, and (III) a shared repertoire. The below table provides empirical indicators of the existence of a community of practice.

<b>Dimension</b>	<b>Indicators of a community of practice</b>
Mutual engagement	1) Sustained mutual relationships - harmonious or conflictual. 2) Shared ways of engaging in doing things together. 3) The rapid flow of information and propagation of innovation. 4) Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process. 5) Very quick setup of a problem to be discussed.
Joint enterprise	6) Substantial overlap in participants' descriptions of who belongs. 7) Knowing what others know, what they can do and how they can

<sup>29</sup> For a more detailed discussion of the three abovementioned works, see e.g. Murillo (2011).



	contribute to an enterprise. 8) Mutually defining identities. 9) The ability to assess the appropriateness of actions and products.
Shared repertoire	10) Specific tools, representations and other artefacts. 11) Local lore, shared stories, inside jokes, knowing laughter. 12) Jargon and shortcuts to communication as well as the ease of producing new ones. 13) Certain styles recognized as displaying membership. 14) A shared discourse reflecting a certain perspective on the world.

**Table 3.1: Indicators that a community of practice has formed**

Source: Murillo (2011) (adapted from Wenger, 1998, pp. 125-126).

In 2001, Wenger described a community of practice (COP) as:

... a group of people who share an interest in a domain of human endeavor and engage in a process of collective learning that creates bonds between them: a tribe, a garage band, a group of engineers working on similar problems (p. 2339).

Wenger (2001) further defined learning as "... a dynamic, two- way relationship between people and their communities. It combines personal transformation with the evolution of social structures" (p. 2341). In what Murillo (2011) refers to as a "simplified model" (Wenger's social theory of learning and the role played by the community of practice concept section, para. 3), Wenger (2001, pp. 2339–2340) proposed three crucial characteristics of a COP that differ somewhat from his previous three elements; the *domain*, the *community* and the *practice*: (I) A COP is focused on a domain, and membership thus implies a minimal degree of knowledge of that domain. This distinguishes a COP from a club of friends or other similar connections between people. The domain does, however, not have to be recognized as "expertise" outside of the community (Wenger, 2001, p. 2339). (II) In order to build relationships and form a community around their domain, members connect through joint activities and discussions, provide assistance, and share information. Although someone has the same job or title, this does not mean they form a COP unless they meet, interact and learn together (Wenger, 2001, p. 2339). (III) A COP requires its members to develop a shared practice through experiences, stories, tools and ways of addressing recurring problems (Wenger, 2001). This development of shared practices necessitates interactions over time. These interactions can be consciously planned or develop naturally.

The issue of power is treated somewhat differently within the COP literature. Orr (1990) argued that "occupational communities ... have little hierarchy; the only real status is that of member" (as cited in Brown & Duguid, 1991, p. 48). This is also the stance preferred

by Brown & Duguid (1991). In contrast, Lave & Wenger (1991) demanded consideration of power relations, criticizing the downplay of conflicts and antagonism in the COP literature (Contu, 2008). However, Wenger's subsequent works have been criticized for insufficiently addressing unequal power relations, and scholars such as Fox (2000) have proposed the merging of the COP theory with actor-network theory (ANT) and Foucault's theories on the relationship between power and knowledge. Although such a framework is out of the scope for this thesis, it could be an interesting combination of theories to base future research on.

### 3.4 Trust

According to Newell et al. (2009), "high levels of trust are considered necessary in order to facilitate the type of communication and dialogue that is needed for people to share tacit knowledge and generate learning that can lead to knowledge creation" (p. 93). This does not only apply to personal relationships, but also between organizations (Faems, Janssens, & van Looy, 2007). Although trust is important for knowledge creation, it is difficult to establish (Newell et al., 2009, p. 93).

Mayer, Davis, & Schoorman (1995) defined trust as "*the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party*" (original emphasis) (p. 712). While there are several different definitions of trust, and more than a few types of trust proposed, I will use Newell et al.'s (2009, p. 94-96) threefold typology of trust. This is because this typology pulls together typologies from the literature, and thus builds on established works on trust and knowledge creation.

The first type of trust is *companion trust*, which is based on goodwill or personal friendships. The trust rests on a moral foundation and an expectation of others behaving in a manner that does not harm the network or community. Openness and honesty is expected. The trust will develop slowly over time, through a process where people get to know each other personally and often become friends. This type of trust is the most resilient due to its strong emotional component. However, if the trust is broken, companion trust is most likely to leave the greatest conflict (Newell et al., 2001, p. 95).

The second type of trust is *competence trust*, which is based on perceptions of another person's skills and competence to successfully perform a task. There is not necessarily any need for personal exchange; the reputation of the person or institution/professional group the person belongs to can be enough. This type of trust can thus develop quickly, but is also more

fragile, and tends to break down if the trustee does not demonstrate the expected competencies (Newell et al., 2009, pp. 95–96).

The third type of trust is *commitment trust*, which originates out of contractual agreements between the parties. This does not necessarily involve a formal contract, but can also arise out of a condition where both parties receive mutual benefits and thus can be relied on to be committed to the contract or agreement. If any party would have to resort to the contract or agreement, it would already be a sign of the commitment trust having broken down. This type of trust is viewed as more resilient as competence trust, since the mutual benefits in most cases outweigh any loss of respect for the other parties abilities or competences. However, if the other party fails to deliver the agreed on benefits, the contract or agreement is likely to be dropped, thus making this type of trust less resilient than companion trust (Newell et al., 2009, p. 96).



## 4 Methodology and research approach

This chapter presents the research process of the thesis. It is written in a personal tone in order to provide the reader with a transparent picture of the research procedure. In structuring my work with the thesis, I have tried to follow Kvale's (2007, pp. 35-36) seven stages. These are thematizing, designing, interviewing, transcribing, analyzing, verifying and reporting. Although the research process is not necessarily a linear one, presenting it this way makes it easier to follow the workflow.

### 4.1 Research questions and choice of method

#### 4.1.1 First steps

According to Bradshaw and Stratford (2010), “research aims affect research design” (p. 71). My first step was thus to broadly identify the phenomenon I wanted to study, which was Internet fraud in Nigeria. Due to the lack of prior research, it was early on in the process clear to me that I would have to travel to Nigeria in order to gather empirical data. At this stage there were two main challenges facing me: Access to informants and safety issues. In order to gather information about the possibility of traveling to Nigeria, I first contacted a Norwegian researcher who had visited Nigeria a few years prior. He informed me that finding cheap and safe accommodation would be a major issue. Furthermore, he did not have any relevant contacts, except for a professor in Lagos that usually charged a “handsome consulting fee.” In general, he expressed doubts about the possibility of speaking to informants in Nigeria. I also sent an email to the Norwegian Embassy in Abuja, Nigeria, but received no reply.

I then contacted Professor Daniel Jordan Smith who has carried out extensive research in Nigeria since the late 1980s. Among other works, he has written the book *A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria* (Smith, 2007). One of the chapters deals with the issue of Internet fraud in Nigeria, and I hoped he would have information or contacts that would be useful. Professor Smith put me in touch with Dr. Kamela Heyward-Rotimi. She was conducting research in Nigeria on Nigerian youth, 419 culture and its subsequent underground economy. Dr. Heyward-Rotimi proved to be willing to assist me both with contacting informants and arranging accommodation at the Obafemi Awolowo University in Ile-Ife, Nigeria.

### **4.1.2 Research questions**

Defining the research questions is according to Yin (2009) "... probably the most important step to be taken in a research study ..." (p. 10). Conducting a literature review is one way to formulate precise research questions (Cooper, 1984). Yin (2009, p. 14) noted that the literature review is a means to an end, not an end in itself. It helps us to develop questions, but not necessarily to determine the answers. Due to the limited prior research on my area of interest, my initial literature review mainly consisted of reading about Nigeria in general and browsing for newspaper articles detailing Internet fraud in Nigeria. While I did look into a few different theoretical frameworks, the uncertainty about what information I would be able to gather in Nigeria made it difficult to finish this process before the fieldwork.

According to Hesselberg (2012, p. 9), the possibility of a null case is often higher in an unfamiliar place. A null case is a situation where the research objective has become irrelevant or is impossible to answer due to unexpected reasons in the place of study. Because of the uncertainty of being able to talk to informants and the lack of previous research, I chose an inductive rather than a deductive approach. This both minimized the risk of not being able to collect any data on the questions I wished to explore, and at the same time allowed me the flexibility to investigate any new information that could surface. The research questions were subsequently re-formulated and sharpened several times after I had conducted the interviews in Nigeria.

### **4.1.3 Choice of method**

The choice of research method is usually determined by the types of questions asked (Yin, 2009, pp. 10-11; Hesselberg, 2012, p. 6). In my opinion, Internet fraud in Nigeria could be studied in at least two broad ways. The first would be by asking questions such as "how many Nigerians are involved in Internet fraud" or "what are the financial implications of Internet fraud on Nigeria's GDP?" In order to answer these types of questions that focus on quantification, I would use a quantitative (or extensive) research method such as statistical analysis or survey. This method is characterized by "... identifying regularities, patterns, and distinguishing features of a population, often through a sample that has been selected using a random procedure to maximize the possibility of generalizing to a larger population from which it is drawn" (Bradshaw and Stratford, 2010, p. 71). Another type of questions asked could be "why is Nigeria known for Internet fraud" or "how are methods and techniques in Internet fraud shared among Nigerians?" These types of questions are usually best answered

through a qualitative (or intensive) method, which according to Hesselberg (2012) provides “... depth of knowledge and allows for unexpected information” (p. 12).

I ended up choosing the qualitative research method. There are three main reasons for this: (I) I felt it was best suited for the types of themes I wanted to explore. It would be extremely difficult to collect quantitative data about Internet fraud in Nigeria. There was no known existing data that could be used either. In addition, Hesselberg (2012) noted that “in many countries in the South statistical sources are few, and those available may have low reliability. It is thus necessary to conduct own interviews of persons, household, organizations or firms as analytical units” (p. 6). (II) The qualitative research method would allow me to fully utilize the chance of interviewing informants in Nigeria. Very little research had been done on this field, and meeting the informants I planned to interview would give me the chance to possibly provide new insights. (III) I conducted a field study in Zambia in 2009 partly based on a qualitative research method, and I felt I could build on those experiences for my master’s thesis. While I did consider using a mixed method approach, I abandoned this idea due to the difficulties in finding and/or collecting quantitative data about my chosen topic.

#### **4.1.4 The qualitative research method**

Broadly defined, qualitative research encompasses “... any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” (Strauss and Corbin, 1990, p. 1). According to Punch (2005), “qualitative research methods is a complex, changing and contested field – a site of multiple methodologies and research practices. ‘Qualitative research’ therefore is not a single entity, but an umbrella term which encompasses enormous variety” (p. 134). Further, Bradshaw and Stratford (2010) highlight that in regards to the qualitative method “... no single correct approach to research design can be prescribed” (p. 70). I have tried to adhere to generally accepted best practices in the qualitative research methods such as critical reflexivity, informed consent, privacy, and avoiding potential harm to informants (Cloke et al., 2004; Hammersley & Atkinson, 2007; Hay, 2010; Kvale, 2007; Punch, 2005; Ragin & Amoroso, 2011; Yin, 2009).

## **4.2 Data collection**

### **4.2.1 Safety issues**

Safety issues were the main concerns among staff and fellow students when told about my plans to conduct interviews in Nigeria. Suicide bombings, terrorist attacks and general unrest have been the prevalent issues in the western media coverage of the country during the last few years (BBC, 2011, 2012a, 2012b). Campbell (2011) noted that both Lagos and Abuja were rated as “critical threat for crime posts” by the US Department of State, which is “... the highest (worst) designation outside an active warzone” (p. 38). I did, however, not view the safety issues to be unacceptable due to three main reasons: (I) The assistance of Dr. Heyward-Rotimi would ensure transport to and from Lagos, safe and reasonably priced accommodation at the Obafemi Awolowo University Conference Center, and access to informants she could vouch for. (II) Most of the bombings and terrorist attacks have occurred either in the north or in the southeast of the country, not in the southwest where I was to travel. (III) I have worked six months in Zimbabwe, conducted a five week long field study in Zambia, and crossed the entire length of Africa by bicycle. I felt this had given me the necessary experience to not put myself into considerable risk or harm.

### **4.2.2 Location and duration**

The fieldwork was conducted between the 29<sup>th</sup> of November and 17<sup>th</sup> of December 2012 in Ile-Ife, Nigeria. Ile-Ife is a mid-sized city with roughly 600 000 inhabitants (Encyclopædia Britannica, 2012) and is home to the Obafemi Awolowo University. The city is situated in the south-west of Nigeria, 79,5 km from the country’s second or third most populous city (estimates vary), Ibadan (Google, 2012a), and 220 km from the country’s most populous city, Lagos (Google, 2012b).

I chose to travel to Ile-Ife due to Dr. Heyward-Rotimi being based there. It could be argued that Lagos would perhaps present the best location in Nigeria for my research due to the city’s size and the agglomeration of various criminal sectors. According to Informant 4, “anything that happens in Nigeria it comes out of Lagos” (personal communication, December 14, 2012). However, Dr. Heyward-Rotimi pointed out that the “culture” of Internet fraud reaches and impacts all corners of Nigeria, and is not centralized just in Lagos. This is in line with Smith (2007, pp. 33-39) who observed Internet fraud in various parts of Nigeria. Further, the Yahoo Boys are not necessarily “hardcore criminals,” but often students in higher education (as discussed in section 2.2.2). Informant 4 argued that Ile-Ife actually is a quite



important hub for Internet fraud due to its moderate population, but sizable university: “It’s a university town. No noise, not too much. ... It’s quiet so it gives them the opportunity” (personal communication, December 14, 2012). I thus believe that all issues taken into consideration, Ile-Ife was a good choice of location for my research. The cost of accommodation, safety issues and access to informants, were all exceedingly large obstacles in Lagos. In Ile-Ife these issues were not only less prevalent, but having access to the informants of Dr. Heyward-Rotimi proved to be indispensable.

The duration of the fieldwork was mainly influenced by the cost of accommodation. I received 5000 NOK in support from the University of Oslo, which covered most of the price for the plane tickets. The rest of the expenses were covered by my private finances, which allowed me to stay for a maximum of three weeks. If I were to arrange the interviews myself, I would probably have had to stay in Nigeria for an extensive period of time. Due to being an American and therefore a foreigner, Dr. Heyward-Rotimi was suspected to be a CIA or FBI agent when she approached the Yahoo boys, even though her husband is from Ile-Ife and she had lived in the city for some time. It took two years of ethnographic fieldwork before she had gained the confidence of her informants. I was therefore very fortunate to gain access to her informants. Without her assistance it would have been close to impossible to conduct the interviews. While a longer stay surely would have been rewarding, I felt that within the scope of my thesis, 19 days allowed me to conduct the interviews needed.<sup>30</sup>

### **4.2.3 Interview preparations**

Qualitative interview research is a “little standardized craft” (Kvale, 2007, p. 8). The rules and procedures often depend upon the purpose or topic of the research. I have thus tried to critically examine which guidelines presented in the literature to follow, and have outlined these choices below.

My first decision was which of the three major forms of interviewing I should use: The structured, semi-structured or unstructured interview (Hay, 2010, p. 102). I felt that the structured interview, which follows a predetermined and standardized list of questions, would be too rigid: (I) There was little previous research I could base my questions on. (II) I would probably receive a lot of new data. That information could not be explored if I was unable to adjust the questions and interview schedule. (III) obtaining access to a set of informants that

---

<sup>30</sup> Hesselberg (2012, p. 14) noted that “in economics and political science three weeks may be sufficient” (although this of course varies significantly based on the topic, research method and other factors).

could be asked the same standardized list of questions would be extremely difficult. On the other hand, the unstructured interview seemed a bit too vague. Even though I would explain the aim of my research to the informants, I worried that the interview could spin off into any direction. Having no prepared questions would also put the informant in a position where he or she basically had to guess what I was interested in talking about. I thus chose the semi-structured interview method since it would allow me to formulate pre-defined questions in an interview guide, but at the same time allow me to explore new information that could surface during the interview (Hay, 2010, p. 102-110; Kvale, 2007, pp. 10-22).

A pilot inquiry helps the researcher to refine the content and procedure to be followed in data collection (Yin, 2009, p. 92-95). Even though the benefits without doubt are many, I did not conduct a pilot inquiry. My interviews were to be conducted in Nigeria, with informants I was not even certain would want to talk to me. I did, however, discuss my themes and questions with Dr. Heyward-Rotimi. She had conducted several interviews with informants who were involved in or had knowledge of Internet fraud in Nigeria quite recently, and therefore provided valuable input. The themes were first discussed via email in the time before I traveled to Nigeria. When I arrived in Ile-Ife we were able to discuss the questions again in person. Through these discussions I believe my questions were improved considerably.

On the 30<sup>th</sup> of October 2012 I conducted an interview with an employee at Økokrim (The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime). While it could not be called a pilot inquiry, it provided me with interview training, the opportunity to test out the audio quality for voice recording, and a few bits of information.

#### **4.2.4 Access to informants**

In a qualitative study, the sample of informants does not usually have to be representative of the larger population. While this means that the sampling methods in a qualitative study usually are less specific, there are still several to choose from (Hay, 2010, p. 75-76). Personally, it was important that the informants I wished to interview possessed intimate knowledge of Internet fraud in Nigeria. I thus employed criterion sampling, where informants have to meet one or several criterion (in my case intimate knowledge of or participating in Yahoo Yahoo). Further, I had to base the selection on opportunistic sampling and snowball sampling. These two sampling approaches are quite common, and mean that the researcher

follows new and unexpected leads, and in the case of snowball sampling finds new informants and information via existing informants (Hay, 2010, p. 75).

Although the above sampling methods were chosen, a gatekeeper was the key source of informants. Gatekeepers are individuals who are "... in an official position to handle inquiries about an organization or who are powerful figures within a particular group (Cloke et al., 2004, p. 156). According to Hammersley and Atkinson (2007), "seeking the permission of gatekeepers or the support of sponsors is often an unavoidable first step in gaining access to data" (p. 58). In some cases, gatekeepers can refuse to cooperate unless the researcher meets certain conditions. In other cases the gatekeeper can perhaps be a bit too enthusiastic and cooperative. Both of these ends can be problematic if it leads to biases or impacts the research profoundly. It is thus important to acknowledge that "... even the most friendly and cooperative of gatekeepers or sponsors will shape the conduct and development of the research" (Hammersley and Atkinson, 2007, p. 59).

Four out of the five interviews that were audio recorded were arranged through Dr. Heyward-Rotimi. Such a large proportion of the interviews being arranged by one person could usually be said to lead to possible biases. In my case the gatekeeper is a researcher with a Ph.D. from the University of Massachusetts Amherst and my co-supervisor for the thesis. While gatekeepers in some situations have the incentive to hide and/or emphasize certain informants or sources of data to the researcher, I see no obvious reasons for that to have happened to me. Dr. Heyward-Rotimi has spent two years getting in touch with and establishing rapport with her informants. As an anthropologist she has followed extensive ethnographic practices and ethical protocols in her research. In addition, she is not a powerful figure in the group of cybercriminals, but an African American from California with a different cultural background. I would argue that the length and scope of my thesis taken into consideration, interviewing some of Dr. Heyward-Rotimi's informants in many ways strengthens the data. I believe that her verifying that I indeed was just a student from Norway, and not for example an investigator, was actually of great importance. While none of the informants openly claimed to be involved in Internet fraud, I still think that they would have been a lot more skeptical in talking to me if I had not been introduced to them through someone they trusted.

#### **4.2.5 Interviewing**

When conducting the interviews I followed the recommendations of Kvale (2007, p. 51-65) Cloke et al. (2004, p. 148-159) and Dunn (2010, p. 101-118). The interviews began with a

briefing where I shortly presented myself, the purpose of the research, and how I had gotten in touch with the informant. I then explained the issues of anonymity, safety, the option to not answer questions, and that I could be contacted afterwards in case of concerns. I then asked for permission to use an audio recorder.

I chose to record the interviews rather than using a notebook and pen. This allowed me to focus on the conversation and provided the opportunity to create transcripts that would ensure greater accuracy in the subsequent analysis (Dunn, 2010, p. 119-121). Having the audio recordings and transcripts on file would additionally strengthen the reliability of the data. For audio recording I used an iPhone 4S. I chose this over an audio recorder for several reasons: (I) I felt it provided better sound quality than the audio recorder I had previously used. (II) It enabled me to easily back up the files onto my laptop. (III) the iPhone was protected with an additional password containing numbers and letters, rather than the standard 4-digit pin. This made sure the interviews could not be accessed by anyone else than me. Additionally, I had access to a web-based control panel that allowed me to track the iPhone and even remotely delete all the information on it in case it was stolen. This provided an extra layer of safety for the informants. I had a few concerns that such a relatively expensive phone could draw attention from the interview. This did, however, not prove to be an issue.

Building rapport with the informant is "... basically a matter of understanding their model of the world and communicating your understandings symmetrically" (Dunn, 2010, p. 112). I tried to establish good rapport early on by introducing myself as a student with great interest in technology, the Internet and its connection to Nigeria. I dressed informally and brought only a notebook and a cell phone. Minichiello et al. (1995, p. 80) argue that the perceptual language, views of the world, speech patterns, posture and breathing patterns of the informant could be matched in order to communicate effectively. I did, however, rather try to just be myself, act polite, but at the same time probe a bit if I disagreed strongly with the informant about an issue. Kvale (2007) noted that "the research interview is an inter-view where knowledge is constructed in the inter-action between the interviewer and the interviewee" (p. 1). Although the informants were quite talkative and definitely talked the most, I still tried to do my best to give input here and there.

The questions in the interview guide were formulated as broad primary questions with secondary follow-up questions or points underneath (see the interview guide in the appendix). I tried to follow the advice of Dunn, (2010, p. 106) by formulating a mix of question types. Having the interview guide in front of me definitely made it easier to keep up with what

informants had answered and what I still needed to inquire about. I tried to avoid yes/no questions and questions that could be interpreted as leading to ensure that the informants offered their opinions in their own words (as recommended by Dunn, 2010; Hammersley and Atkinson, 2007, pp. 119-120). This kept the conversation flowing in a good manner. All the informants were very articulate and seemed eager to explain the answers to my questions in great detail. Throughout the interviews I tried to focus on what Kvale (2007) refers to as the “qualified naïveté” (p. 12). This means that I should be open to new and unexpected phenomena, curious and sensitive to what was said – as well as what was not said – and reflective about my own presuppositions.

Dunn (2010, p. 117-118) stresses that the interview should not be rushed to an end, but at the same time not drag on. It is important that the rapport does not dissipate at the close of the interview. Thus, a clumsy end to the conversation should be avoided. Through my previous travels I have noticed that people usually like to talk about their country. Especially comparing your own country to neighboring countries is a source of both interesting information and a bit of fun. When I during the interviews noticed that I had gotten the answers to what I wanted and/or the informant was finishing up, I asked for permission pose one last question. I then inquired why the informant thought that Internet fraud was so prevalent in Nigeria compared to the other African countries nearby. Basically, “what is special about Nigeria?” While I knew there were no correct answers, this question always lead to a humorous ending to the interview. It had moved on to a more informal conversation, creating a relaxed atmosphere and a pleasant end to the interview. Before we parted I reminded the informants of the issues of anonymity and safety, and told them they could contact me if they had any concerns. Informants 1, 2, 3, 4 and 5 said they did not need to read the transcripts or confirm their statements. Agunbiade (Informant 6) requested a copy of the finished thesis.

## **4.3 Informants**

### **Informant 1**

The interview was conducted on the 30<sup>th</sup> of November, 2012, and lasted for approx. 120 minutes (including 30 minutes of small talk after the interview). It was arranged through Dr. Heyward-Rotimi who was also present during most of the interview. The informant was a young man in his mid-twenties from the Ile-Ife area, coming from a middle-class background. The informant did not claim to be involved in Internet fraud personally, but possessed

detailed knowledge of the topic. He was friendly and well-formulated, providing for an informative and relaxed interview.

### **Informant 2**

The interview was conducted on the 1<sup>st</sup> of December, 2012, and lasted for approx. 90 minutes. It was arranged through Dr. Heyward-Rotimi. There were no other people present during the interview. The informant was a young man in the mid-twenties from the Ile-Ife area, coming from a middle-class background. He had recently spent time in Malaysia for studies, but elaborated on the fact that many Nigerians go to Malaysia to conduct Internet fraud or other types of crime. While he did not openly admit to having conducted Internet fraud, I was given the impression that he perhaps had engaged in it on at least a low level (although this is only speculation). The informant was open, friendly and seemed to enjoy talking about the topic. He possessed both intimate knowledge on the technical aspects of the Internet fraud, and also reflected on the moral dilemmas surrounding email scams and other aspects of Internet fraud that are common in Nigeria.

### **Informant 3**

The interview was conducted on the 12<sup>th</sup> of December, 2012, and lasted for approx. 45 minutes. It was arranged for me through a student who showed me around at the Obafemi Awolowo University. There were some other students coming and going, and the student who introduced me to the informant was participating in some discussions toward the end of the interview. The informant was a young man in his late teens or early twenties. This informant was a bit more vary of talking to me, perhaps since he was introduced to me on short notice. Once we got into the interview he became more talkative. At the end he even offered to take me to a party the next evening where I could observe some of the “big boys” in Internet fraud. I did, however, decline this offer after speaking to Dr. Heyward-Rotimi and others who strongly advised against it due to security reasons.

### **Informant 4 and 5**

The interview was conducted on the 14<sup>th</sup> of December, 2012, and lasted for approx. 90 minutes. It was arranged through Dr. Heyward-Rotimi and a researcher at the Obafemi Awolowo University. The local researcher was present during the interview, and he joined in on the discussions toward the end as Informant 5. I do not believe he affected the answers of the Informant 4, a young man in the mid to late twenties. He had a computer degree and

currently worked as a hardware repair specialist. Since Informant 4 often repaired computers for Yahoo boys he possessed detailed knowledge about their methods and techniques.

### **Ojo Melvin Agunbiade**

The interview was conducted on the 14<sup>th</sup> of December, 2012, and lasted for approx. 40 minutes. It was arranged through Dr. Heyward-Rotimi. Agunbiade is a lecturer in the Department of Sociology and Anthropology at Obafemi Awolowo University in Ile-Ife, Nigeria. Agunbiade has studied the aspect of local religion, shamanism, spells and similar supernatural beliefs in connection to Internet fraud in Nigeria (so-called Yahoo Plus). Agunbiade was friendly, well-spoken and was able to confirm that many of the findings from my earlier interviews were in line with what he had heard from informants in his research.

### **Additional insights**

In addition to the five interviews that were audio recorded, I also conducted several informal conversations with students and other people in the Ile-Ife area. I used these conversations to check if any of the claims made during the recorded interviews would be disputed, and to gain potential new information. The informal conversations were all in line with what was said during the interviews. There were few statements from the interviews and informal conversations that were contradictory or inconsistent. In general I felt that I had achieved knowledge saturation within the limits of my time and resources.

## **4.4 Ethics and informant safety**

Ethical dilemmas are common in qualitative research, and there are not always definite answers to them. Ethical failures, on the other hand, are decisions that are at odds with professional standards of ethics. According to Ragin and Amoroso (2011), these include:

... deliberately publishing made-up data, plagiarizing the work or ideas of others, taking credit for other's work, giving undue credit to someone who did not contribute to the work, mistreating collaborators and research participants, or concealing known concerns about the research process and results (p. 81).

While this list is quite specific, they acknowledge that it is not always easy to decide whether a decision is an ethical dilemma or an ethical failure. I have tried to paint a clear picture of my decisions below in order to present the reasoning for the choices I made.

Interviews generate knowledge through a social relationship between the interviewer and the interviewee. The information obtained is often personal, and can in some cases be used against the informant or the surrounding community (Kvale, 2007, p. 8). This naturally leads to issues of whether pursuing interesting knowledge, or the ethical respect for the integrity of the interview subject should be given priority (Punch, 2005, p. 276-278). However, ethical issues are not only relevant during the interviews themselves. According to Kvale (2007), “ethical issues go through the entire process of an interview investigation, and potential ethical concerns should be taken into consideration from the very start of an investigation and up to the final report” (p. 23).

Some researchers argue that the study area should be made anonymous in order to avoid a possible negative impact (Hesselberg, 2012, p. 57). At the same time, it is difficult to provide an interesting description of a phenomenon if the area of study is unknown. I chose to expose the site of my research since I do not believe it will impact Ile-Ife in a negative way, or help expose my informants. If you ask anyone in the western world what he or she associates with Nigeria, Internet fraud is probably high on the list. I believe that while I in some sense reinforce this image by writing about the topic, I also try to show that the issue is much more complex than what has previously been portrayed. Exposing my place of interest also increases the reliability since it gives other researchers the opportunity to travel to Ile-Ife and form their own opinions.

The interviews, on the other hand, were all made anonymous, except for Agunbiade who did not find it necessary to be anonymized. Since he is a lecturer at a university, I felt he knew the reasoning associated with anonymity. If any of the other informants had wished to have their real name displayed in the thesis, I would have been less certain. As described in section 4.2.5, informed consent was granted before each interview after a presentation of the research and myself. Consent for voice recording was also granted in all of the interviews. The informants also agreed on me sharing the recording with Dr. Heyward-Rotimi, except for informant no. 3 who wished for only me to have access to the voice recording.

To ensure that the recordings could not get into the wrong hands, they were as previously mentioned recorded on a password-protected iPhone 4S, and subsequently transferred to a password-protected laptop. Similarly to the phone, the hard drive of the laptop could also be remotely wiped in case of theft. I felt that this was a security measure that ensured the protection of the informant’s identity. If the interviews had contained material that could connect the informants to Internet fraud activities, I could additionally have applied



voice-altering software on the recordings, and subsequently deleted the original ones. I did, however, not deem this necessary due to none of the informants explicitly stating to be Yahoo boys. In order to ensure that the recordings would not be lost if any of my devices were stolen, they were duplicated to an encrypted server on the Internet.

Another issue in the interview setting is power relations. According to (Kvale, 2007) “the interviewer is in a power position and sets the stage by determining the topic of the interchange; it is the interviewer who asks and the interviewee who answers” (p. 2). Being a man from Europe could potentially also impact the power relations, since I probably would be regarded as relatively wealthy in comparison to the informants. However, being a casually dressed, young student, I do not believe the power relations in the interview were unacceptably skewed. I acted polite and remained open and attentive through the interviews, so at least from my perspective it did not feel as I inhibited their answers or made them change their answers to better fit what they thought I would want to hear. It should also be noted that the first three interview participants were university students, the fourth a computer hardware specialist with a master’s degree and the fifth a lecturer at the Obafemi Awolowo University. I therefore do not believe that they viewed me as having any excessive amount of power or status compared to them.

## **4.5 Analysis**

According to Kvale (2007), “the method of analysis should not only be given thought in advance of the interviewing, but may also, to varying degrees, be built into the interview situation itself” (p. 102). I therefore strived to analyze what the informant described throughout the interview in order to clarify issues that were ambiguous or could have several interpretations. After the interview I recorded notes and comments in a basic research diary that I updated during the stay in Nigeria.

All the interviews were subsequently transcribed. This was an extensive process which resulted in roughly 52 000 words. I believe that transcribing the interviews myself and without e.g. transcription software helped me to become more familiar with the interview data. I chose to transcribe the interviews in verbatim, but not in the strictest sense. This means that I transcribed every word, but did not find it necessary to make an effort to fully include all sounds or non-verbal communication such as e.g. laughter and pauses. Each interview transcript was labeled with the number of the informant, a short background description, the date, and approximate duration.

The subsequent analysis was conducted ad hoc, also termed “bricolage.” Kvale (2007) argued that “this eclectic form of generating meaning – through a multiplicity of ad hoc methods and conceptual approaches – is a common mode of interview analysis” (p. 115). Dunn (2010) noted that computer programs such as NVivo or QSR N6 are effective tools for certain types of analysis (p. 125). I did, however, rather opt for the computer program Evernote. This computer program allowed me to import and organize the transcripts along with relevant scholarly articles, newspaper clippings and personal notes. I re-read the interviews several times during the process of analysis. For each new reading, I focused on a different theme, creating a new version of the transcript where I added labels and notes to interesting sections and identified quotes that I could use. Since the research process was inductive in general, I found this method to work satisfactory for me, and I felt that I gained new insights for each new reading. By the use of Evernote I was also able to combine insights from the research diary and informal conversations in Nigeria that were not recorded with relevant sections of the interviews. The deep immersion into the transcripts did in general prove to be an important part of the analysis.

## **4.6 Reliability and validity**

The traditional criteria for the terms reliability and validity are found in the positivist epistemology of the quantitative research method. There, reliability and validity are the culmination of other empirical concepts such as universal laws, evidence, objectivity and truth (Winter, 2000). In contrast, qualitative research is usually based on a naturalistic approach where the phenomenon is understood in a context-specific setting (Golafshani, 2003, p. 600). The use and definition of reliability and validity in qualitative research is thus contested, and for example Strauss and Corbin (1990) suggest that in order to evaluate qualitative research, the “usual canons of ‘good science’” must be redefined (p. 250). I will below briefly discuss the concepts of reliability and validity as used in qualitative research.

### **4.6.1 Reliability**

According to Punch (2005), reliability “basically means consistency” (p. 95). In qualitative research the concept of reliability is less concerned with if the data is “correct” or measured “correct,” but rather concerned with whether the research is trustworthy. Detailed descriptions of the research process; including preparation, data gathering and analysis, are viewed as the most important aspects of reliability (Sykes, 1991). This will according to Stenbacka (2001)

enable “conditional intersubjectivity,” which she argued is key for ensuring research of good quality (p. 552).

According to Hesselberg (2012), ensuring that the research is trustworthy is perhaps especially important when conducting a fieldwork in a different country, since it is difficult to “easily check the reliability and validity of the data or the relevance of the adaptation of techniques to the local context” (p. 21). I have therefore made an effort to present a detailed description of the research procedure and reflect on possible biases in all stages of the process.

#### **4.6.2 Validity**

Ragin & Amoroso (2011) noted that “social researchers’ concern for validity is seen in their efforts to verify that their data collection and measurement procedures work the way they claim” (p. 23). The term validity was argued to simply mean “truth” (ibid.). Punch (2005) claimed that the term validity has several technical meanings: (I) The *validity of data*, which usually is expressed as the question “how well do these data represent the phenomena for which they stand?” (p. 29). (II) The *overall validity of the research*, concerning how the different parts of the study fit together. (III) *Internal validity*, which is concerned with the study’s research design and if it provides a “true” reflection of the reality studies. (IV) *External validity*, which concerns the generalizability of the study.<sup>31</sup> Further meanings of the term validity are *descriptive/contextual validity*, which refers to the thoroughness of the research, and *interpretive validity*, which deals with if the account connects to the “lived experience” of people in the case (Miles & Humberman, 1994, p. 36). I have attempted to keep issues of validity in mind throughout the research process, although my personal “lenses” are likely to have affected the thesis in numerous ways.

#### **4.7 Biases**

According to Winchester & Rofe (2010) “our choice of what we study and how we study it reflects our values and beliefs” (p. 16). Thus, whether a quantitative or qualitative research method is applied – there will always be possible biases. Especially in this thesis where the

---

<sup>31</sup> Statistical generalization is not an aim in qualitative research (Kvale, 2007, p. 87). However, if the researcher wishes to draw a generalization, it will be an *analytical generalization*, which “... involves a reasoned judgement about the extent to which the findings from one study can be used as a guide to what might occur in another situation” (Kvale, 2007, p. 127)

empirical data is based on qualitative interviews, biases are unavoidable. However, rather than listing possible biases in this section, I have strived to be open about them throughout the thesis.<sup>32</sup>

Yahoo Yahoo entails a number of normative considerations. The practice can be viewed in several ways, ranging from labeling the Yahoo boys as outright criminals to excusing their actions due to poverty and a desperate situation. Prior encounters with Internet fraud could also have affected the researcher. Personally, I have mixed emotions towards Yahoo Yahoo, both viewing it as a crime, but at the same time feeling sympathy for the Nigerian youths' lack of future possibilities compared to my own. Further, Yahoo Yahoo includes different methods that have varying normative aspects connected to them. The fact that I admire the Yahoo boys' creativity and capacity to expand the operations in the way they have, is likely to have affected the entire thesis, from choice of theme and research questions, to the final analysis.

In order to reduce some possible biases, I have attempted to use direct citations from the interviews where it felt appropriate. Providing quotations does not in itself reduce biases, as the selection of quotes is biased as well. However, by providing quotations from several informants where there could be differing opinions on an issue, I hope to have included all possible voices found in the interviews. Dunn (2010) argued that "a quotation ... ought to be treated in much the same way as a table of statistics. That is, it should be introduced and then interpreted by the author" (p. 127). Adding a short discussion to a quotation can therefore reveal my personal biases to the reader when contrasted with the quote.

It should also be noted that although I generalize empirical data from the interviews onto the entire community or culture of Yahoo boys, it is an analytical generalization that is likely to contain weaknesses. While the informants possessed intimate knowledge of Yahoo Yahoo that combined is likely to provide a relatively accurate picture of Yahoo Yahoo, the findings in this thesis should not be viewed as the explicit "truth."

---

<sup>32</sup> A characteristic of a bias is arguably that the author does not consider an issue to be a bias. Thus, it is likely that there exist several biases in this thesis that I have not presented.

## 5 Empirical findings and analysis – Part 1

In this chapter I will discuss the empirical findings that concern question 1: “What characterizes the organization of the Yahoo boys?” During the following sections I will touch upon ideas from several different scholars within the communities of practice (COP) literature. As discussed in section 3.3, the concept of COPs is “... endowed with a large degree of interpretative viability” (Murillo, 2011, Introduction section, para. 1). Further, seminal works by authors such as Lave & Wenger (1991), Brown & Duguid (1991) and Wenger (1998), proposed somewhat differing views on what a COP constitutes.<sup>33</sup> Cox (2005) claimed that the concept of COPs is still evolving. Although the selection of theory is rather eclectic, I argue that the inductive nature of this thesis and the ongoing debate surrounding the theoretical foundation of COPs warrants a pragmatic approach.<sup>34</sup>

In section 5.1, I will outline the evolution of the Yahoo boys communities. This will provide a starting point for further discussion in section 5.2. There, I will explore how Nigerian youths enter the practice of Yahoo Yahoo. Lave & Wenger's (1991, p. 51) theory of *legitimate peripheral participation* will provide the foundation for the analysis of this process. Murillo (2011) noted that “though sketchy, this model is still currently in use, especially in studies focusing on the inbound trajectories of newcomers into established communities of practice” (Seminal studies and rapid diffusion section, para. 2). However, since Lave & Wenger (1991) pay less attention to the community itself, the use of their work is thus mostly limited to entry into the COP.

In section 5.3, I will investigate in what ways the Yahoo boys organize themselves. This will be done on the foundation of Wenger's (1998) *Communities of Practice: Learning, Meaning and Identity*. This work was chosen due to it representing the first clear definition of a COP, and the arguably most complete discussion of the concept (Cox, 2005; Murillo, 2011). Although some of the indicators are quite general and vague, basing the analysis on Wenger's (1998, pp. 125-126) indicators allows for a more organized discussion. Additionally, employing indicators from a seminal work from the theory could make comparisons to other studies more straightforward.<sup>35</sup>

---

<sup>33</sup> See e.g. Cox (2005) and Murillo (2011) for in-depth discussions.

<sup>34</sup> The eclectic use of the COP theory is also observed in e.g. Silva, Goel, & Mousavidin (2008) and Zhang & Watts (2008).

<sup>35</sup> E.g. comparing the Yahoo boys COPs to other COPs.

Wenger's (2001) argument of “having the same job or the same title does not make for a community of practice unless members interact and learn together” (p. 2339) is regarded as central for the entire chapter.<sup>36</sup> If there was no requirement of personal interaction, the whole Yahoo boys culture could arguably be viewed as one COP. This would in my opinion be too broad. Additionally, the analysis will reveal that while there are certain differences among the various Yahoo boys COPs, personal interaction and the trust it builds is perceived to be a key characteristic.

Interaction can not only occur in person, but also through an online (or virtual) COP (Murillo, 2011). However, there is little evidence of online COPs existing among the Yahoo boys. Informant 1 (personal communication, November 30, 2012), Informant 2 (personal communication, December 1, 2012) and Informant 3 (personal communication, December 12, 2012) noted that communication through forums or similar types of websites which could foster an online COP is limited. Informant 1 argued that “... there are no such forums or chatrooms ... it's never on the phone, it's direct education ...” (personal communication, November 30, 2012). Informant 3 added that “no they don't, no no, it's an illegal thing. ... You can't have a forum, you can only have meetings that are nominated” (personal communication, December 12, 2012). Agunbiade also argued that “... when you look at hidden cultures, like groups like this, they hardly document what they do. Just for the fear of, of not being apprehended of the fear of possible reveal of their identity and others” (personal communication, December 14, 2012). Although I cannot rule out that there exist online COPs among the Yahoo boys, the focus of this chapter will rest on the individual COPs where personal interaction is a requirement.

## **5.1 The evolution of the Yahoo boys COPs**

In section 2.2.1 it was suggested that the origins of the Yahoo boys could be connected to wealthy Nigerians who sent their children to study in Europe. There, the youths initiated various schemes such as credit card fraud in order to attain funds for partying and buying luxury items. Even at this point, these youths could be said to have made up a COP. However, since the origins of Yahoo Yahoo and the Yahoo boys are difficult to verify, I will rather focus on the subsequent formation of the Yahoo boys COPs in Nigeria.

---

<sup>36</sup> This statement is not necessarily in direct contrast with e.g. Lave & Wenger (1991), but does narrow the concept down from their more general concept of a community.

As described in section 2.1.3, the Babangida administration pushed for the expansion of international fax and telephone services in the late 1980s. This led to the flourishing of so-called “business centers” where fraud was perceived to have been widespread. During the subsequent Abacha administration, most of the business centers were closed in order to reduce instances of fraud. In 1999, democratic elections were held for the first time in almost two decades. One effect of the transition to democracy was that the government’s tight grip on the communications infrastructure was relaxed. This development was discussed in section 2.2.1, where Informant 4 (personal communication, December 14, 2012) described the efforts of the government to expand the number of Internet connections in Nigeria and provide IT training in order to boost job creation and the economy in general. In combination with the influx of computer equipment from international donors, this resulted in a large number of Internet cafés (or cybercafés) opening throughout Nigeria (Yusuf, 2005). While there are no reliable countrywide statistics available on the number of Internet cafés, growth is perceived to have been substantial. Smith (2007) noted that:

The growth in Nigeria of the Internet café business over the past several years has been dramatic. In Umuahia, a town of perhaps two hundred thousand people, for example, the number of Internet cafés multiplied from just a handful in 2002 to more than forty in 2004” (p. 33).

### **5.1.1 The “cybercaf” COPs**

Informant 1 argued that the introduction of Internet cafés in Nigeria was of major importance for the establishment and growth of the Yahoo boys COPs:

... originally the lower class didn’t have access to the Internet. Because access to the Internet was very expensive then, even owning a cellphone then was very expensive. Even in western terms it was really expensive, so it was only upper class that had that. And then the few boys they introduced them to it, they were also given access to the Internet, and they were using *their* access to the Internet. Now, then the cybercafé came and access to the Internet was available, and those Yahoo boys come to the internet and they started making money, and they too started spending lavishly, and there were boys that sat down with them and they taught those ones too. And then it became a bigger circle and there were now a set of boys that realized ok, you just go to cybercaf, big boys are in cybercaf, we want to learn how to make money and go to cybercaf. ... And, that eventually created a big phenomenon called Yahoo boys (personal communication, November 30, 2012).

Thus, an important effect of the introduction of Internet cafés was that they provided affordable Internet access to a broader set of Nigeria's population. Especially "night browsing" where customers could access the Internet between e.g. 21:00 and 08:00 at a discounted rate became popular. It therefore seems reasonable to argue that Internet cafés were a major enabling factor for the growth of the Yahoo boys COPs in Nigeria.

In June 2006, the Advance Fee Fraud Act was signed into place. Shortly after, the Economic and Financial Crimes Commission (EFCC) ordered the discontinuation of night browsing and conducted crackdowns on Internet cafés (Adaramola, 2006; Adeniran, 2008; Informant 3, personal communication, December 12, 2012). The result was that many of the Yahoo boys abandoned Internet cafés as their primary meeting point. The increased efforts by the EFCC to tackle Yahoo Yahoo also coincided with products such as laptops, USB modems,<sup>37</sup> and internet-enabled mobile phones becoming cheaper and more readily available. Several of my informants described this process:

When you go to the cybercafé, police can just come and raid everybody, start searching what they are doing and you know ... EFCC, Economic Financial Crime Commission of Nigeria, they are into that. ... Everybody is using the modem now. So cybercafé, the business is going down now ... few people go there (Informant 2, personal communication, December 1, 2012).

... people are falling back on cybercafs because of the introduction of the modems, because it's cheaper to use the networks (Informant 1, personal communication, November 30, 2012).

... initially you see a lot of them in cybercafs. But now because the technology is getting cheaper they have the modems (Informant 5, personal communication, December 14, 2012).

The ones you are seeing in cafés are the hungry ones (Informant 4, personal communication, December 14, 2012).

After the general election of 2007, the EFCC lost a considerable amount of recognition. The agency had turned into a tool of political persecution, and combined with other rising problems such as increasing militancy in the north, the EFCC's efforts on Yahoo Yahoo were reduced (Adeniran, 2008; Informant 3, personal communication, December 12, 2012). However, most Yahoo boys had already moved on to new avenues for socializing and exchanging knowledge.

---

<sup>37</sup> A USB modem is a device that can be plugged into a laptop in order to provide access to the Internet from any location that has cellular reception.



### 5.1.2 The university COPs

As discussed in section 2.2.2, many of the Yahoo boys are currently based at or near universities. On December 6, 2012, a student at the Obafemi Awolowo University provided me with a tour of the university grounds.<sup>38</sup> I was taken to see classrooms, several of the university housing complexes, an Internet café on campus, and the area where most of the restaurants and bars are located. From the information gathered during the tour and the interviews conducted, it appears that the COP aspects of the “Internet café era” are still in place. The Yahoo boys simply re-located to new arenas, keeping most of their other characteristics the same.

Although these are observations from one university only, it seems likely that the COPs are converging around what university the Yahoo boys are attending, where they live, or where they party. Thus, unlike the more “static” Internet cafés, these new COPs are more flexible in terms of location. However, access to the COP could in some cases be more strict than previously, e.g. with groups of Yahoo boys based around a common area of study rather than simply meeting at the same location.

## 5.2 Entry into the COP

In section 2.2.3, I explored *why* Nigerian youths want to become Yahoo boys. Unemployment and poverty, as well as peer group influence were argued to be the main motivational factors. In this section I will investigate *how* Nigerian youths become Yahoo boys, as part of the contribution to the discussion of questions 1 and 2.

### 5.2.1 Personal relations

For most Nigerian youths who wish to become Yahoo boys, entry into the practice is heavily dependent on personal relations. As Agunbiade argued “... it’s not an open practice where people can just get into it and exit at their own will ...” (personal communication, December 14, 2012). This is in line with the explanation provided by Informant 2:

... in every institution there are steps to take, you know to climb to ... You know, you can’t just wake up one day and say ‘I want to be a Yahoo boy’ and start doing a lot of things, buy laptop, do this and

---

<sup>38</sup> The student was asked by Dr. Heyward-Rotimi to show me around. There should have been no potential biases or motivation to hide or enhance any information. The student was taking courses in electrical engineering and computer science, and thus possessed intimate knowledge about the Yahoo boys. He did, however, not claim to be involved in Yahoo Yahoo himself.

that. It doesn't work out that way. People must show you the way, how they do it. ... I think the easiest way to get into it is through friends, especially in schools, secondary schools, university. ... So in the club, in the university, you know in your class there is no way in each classes you wouldn't meet somebody. ... If you are not in university and you are not in secondary school, you can't just walk up to somebody, maybe the person is rich and say 'ok, are you a Yahoo Boy, can you teach me?' ... You know, that would be just like harassment. ... They should do have introduced, they should have known that ok, this person, you know, he's really into it (personal communication, December 1, 2012).

The importance of personal relations was also emphasized by Informant 3:

... when you get into school and you are interested in something like that, all you have to do is just move around with those set of people and they will teach you, and before you know it you will be a master of you own (personal communication, December 12, 2012).

### **5.2.2 Legitimate peripheral participation**

A further characteristic of the entry into the COP is that it usually occurs through a period of apprenticeship. This process was termed *legitimate peripheral participation* by Lave & Wenger (1991, p. 51). They described a *triadic* group relation between *masters*, *young masters* (or *journeymen*) and *apprentices* (or *novices*). Informant 4 portrayed a similar process for those wishing to become Yahoo boys:

Just go to any Yahoo Boy, be his slave for six months, be under him. He send you around, 'oh get me pure water, get me Coke, eh,' anything he wants. But then you sit down with him, ok, in six months (personal communication, December 14, 2012).

Although the apprenticeship includes undertaking various task for the senior Yahoo boys (or masters/young masters) there is little evidence that they employ apprenticeship as a way of attaining financial gains. Rather, Informant 1 noted that respect, pride and a sense of camaraderie are important motivations for the experienced Yahoo boys to teach the apprentices:

Most of the time it's not about the money, it's about the pride and the respect you get, the pride like this guy is the big boy. And often times when the teaching is going on these guys are making more money than the person who is teaching them ... You know it's ... a clique kind of thing. These boys are in my group so I teach them (personal communication, November 30, 2012).

In addition, Informant 2 argued that the period of apprenticeship is conducted in order to test the skills and determination of the apprentice:

... it's not every time that they are willing to teach you. Are you getting it. They want to see your seriousness as well. They might force you into doing something that will be frustrating. You would be doing, doing and money would not come out. Are you getting it. So, but you will, your consistency, and you will go back to meet them. 'This thing is not working, now please.' You will stay with them, and ok, 'this one really means business.' They start showing you some part of it. Or, if care is not taken, if you not have an idea before, those guys are smart. They will put you in the dangerous aspect of it. Are you getting it. So those ones that they cannot do, like going to the bank to collect the money, things like that. You know, 'you stay here and watch,' things like that (personal communication, December 1, 2012).

Only after the apprentices have proven that they will contribute to the community, are they accepted as young masters. This ensures that the members get to know each other, that they feel part of the community, and that they can trust each other. An exception is added by Informant 2 who notes that "... if they are your family, relatives or other, of course they will open up to you" (personal communication, December 1, 2012). In this case, they are accepted as young masters, but still need to prove themselves before they become masters. This process is likely to vary considerably, and more empirical data is needed in order to adequately describe the transition from young master to master. Additionally, Lave & Wenger (1991) argued that "everyone's participation is legitimately peripheral in some respect" (p. 117). This means that all members are moving along the trajectory of learning (M. Campbell et al., 2009). Thus, the statuses of apprentice, young master and master are likely to be awarded not only based on skills and expertise, but also on factors such as social relations between members of the COP.

### **5.2.3 Trust**

As described in section 3.4, *companion trust*, which is based on goodwill or personal friendships, takes a long time to develop. However, once it is in place it is the most resilient form of trust. Trust is important for the Yahoo boys COPs due to several factors: (I) Trusting that the other members will contribute to the community. Although members of the COP in some ways are competitors, they are at the same time open about their methods and share a "collective pool of knowledge" (Informant 1, personal communication, November 30, 2012).

(II) Trusting that members will not steal from others. E.g. Informant 1 noted that “... some people hack into the accounts of others and steal their tracking numbers. ... when that happens within them [the COP], that creates a bit of a problem for them ...” (ibid.). (III) Trusting that the other members will not expose them to unnecessary risk or inform the police about their activities. E.g. Informant 2 argued that “so there are some ... they cannot do this Yahoo, or they are not successful. So all they can do to get some money is to call the police. So the police will go there ... they will give you a share” (personal communication, December 1, 2012). Thus, the Yahoo boys have to exhibit some caution in order to avoid disgruntled members of their COP informing the authorities of their operations.

### **5.2.4 Summary**

On the basis of the information above, entry into the COP can be described as a process from peripheral outsider to full insider, termed *legitimate peripheral participation* by Lave & Wenger (1991). During this process, newcomers (or apprentices) go through a period of apprenticeship before becoming full members (or young masters) of the COP. The apprenticeship period enables the experienced members (or masters) to assess the skills, determination and trustworthiness of the apprentices. During the apprenticeship period the apprentices become part of the COP, building companion trust between the apprentices and the masters/young masters. The result of this process is that the Yahoo boys form closely knit communities with frequent interaction between members. In chapters 6 and 7, I will discuss how this is an enabling factor for effective knowledge exchange and innovation.

## **5.3 Characteristics of the COP**

In this section I will compare the Yahoo boys COPs with the 14 indicators of a COP having formed, as proposed by Wenger (1998, pp. 125-126).

### **5.3.1 Mutual engagement**

1. *Sustained mutual relationships - harmonious or conflictual*: In section 2.2, I explored how the Yahoo boys were believed to basically evolve from groups of Nigerian youths who studied in European universities. Their preference of sustained mutual relationships continued once they returned to Nigeria. Informant 1 argued that “you know it’s ... a clique kind of thing. These boys are in my group ...” (personal communication, November 30, 2012). In section 5.1, I found that when Internet cafés were introduced to Nigeria, they became the main gathering points for COPs. After 2006, the COPs seemed

to move primarily to universities, but most attributes seemed to remain intact. E.g. some COPs seem to be based around university housing where the Yahoo boys interact on a daily basis. Similarly, some are based around university courses or classes, also requiring sustained mutual relationships. The general notion of many Yahoo boys COPs basically being groups of friends, was shared in several of the interviews and also observed during my stay in Nigeria. Even in those cases where the COP is organized in a manner that requires less frequent contact, Informant 4 argued that Yahoo Yahoo “... is not a one man job” (personal communication, December 14, 2012). I therefore argue that both on the basis of most Yahoo boys’ characteristics and on the basis of the practice of Yahoo Yahoo – sustained mutual relationships are not only desired, but usually also required.

2. *Shared ways of engaging in doing things together:* Already from the first perceived beginning of Yahoo Yahoo among the Nigerian youths who studies in Europe, it is believed that they engaged in credit card fraud together. Eventually, Yahoo Yahoo diffused into several types of Fraud. However, the members of a COP are seen to utilize most of the same methods, and even share “... a large pool of knowledge together ...” (Informant 1, personal communication, November 30, 2012). Further, as mentioned in the above indicator, most types of fraud common among the Yahoo boys require the assistance of others. Thus, they do not only share the ways of engaging in doing things together, but in many cases also work on instance of Internet fraud together (Informant 2, personal communication, December 1, 2012).
3. *The rapid flow of information and propagation of innovation:* This indicator allows for a wide interpretation, especially since “rapid” and “innovation” are terms that can vary extensively based on the definition used. Following the rest of the thesis, a broad definition of innovation will be applied. Several informants mentioned that new challenges and opportunities quickly were solved through the sourcing of new technologies, services or modes of organization (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12; Informant 4, personal communication, December 14). E.g. Informant 3 displayed his confidence in the Yahoo boys’ innovative capabilities by arguing that “... if you say you want to improve technology to cut people off from doing Internet fraud, boys will still come up with a solution to bypass whatever you are doing” (personal communication, December 12, 2012). The Yahoo boys’ rapid

flow of information and propagation of innovation will be discussed more extensively in chapter 7.

4. *Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process*: This indicator is a bit vague and would ideally require extensive observation and further in-depth interviews. However, what can be argued on the basis of my empirical data is that an instance of Internet fraud usually is a lengthy process. Often, the cooperation between numerous Yahoo boys is required over a period of time. Further, most of the Yahoo boys engage in several scams simultaneously (e.g. communication with numerous potential victims on an Internet dating website). If one instance of Internet fraud is completed, the next one is usually already lined up.
5. *Very quick setup of a problem to be discussed*: This is another vague indicator that allows for a considerable amount of flexibility in the interpretation.<sup>39</sup> For members of a Yahoo boys COP, efficiency is important. If the Yahoo boy encounters a problem with a victim, it is imperative that the issue is resolved quickly, e.g. before the victim changes his or her mind about transferring money. The organization of the Yahoo boys COPs is likely to allow problems to be discussed quickly, e.g. Informant 1 noted that "... if one has a problem when he's chatting with someone, he calls someone else and oh, 'how can I scam, what do I tell him, how can I go across him,' bla, bla, bla" (personal communication, November 30, 2012). By working together in tightly knit groups there is usually always another Yahoo boy nearby to act as a discussion partner.

### 5.3.2 Joint enterprise

6. *Substantial overlap in participants' descriptions of who belongs*: In section 5.2, I described the process of entry into the COP. I argued that most Yahoo boys enter the COP through a process of apprenticeship. Exceptions could be made for family or close friends. In any way, this means that not only is there a substantial overlap in participants' descriptions of who belongs, but also who is allowed to belong.
7. *Knowing what others know, what they can do and how they can contribute to an enterprise*: This is a further aspect of the apprenticeship process that was discussed in section 5.2. By evaluation the apprentices' performance, the masters or young masters who are already part of the COP are likely to gain an understanding of what others know,

---

<sup>39</sup> E.g. in a COP focused on pharmaceutical research, "very quick" probably means something quite different than in a COP focused on computer repairs.

what they can do and how they can contribute. Although some are accepted into the COP due to being family or close friends, the members of the COP are familiar with them and should at least have a basic perception of their abilities. Further, frequent interactions among the Yahoo boys are believed to be common. Their relationships can often be described as friendships, implying a more in-depth understanding of each other than simply being members of the same COP. This means that most members of the COP should possess intimate knowledge about each other's skills and knowledge (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 4, personal communication, December 14, 2012).

8. *Mutually defining identities*: Since the Yahoo boys COPs usually are based around a common Internet café, student housing section, university, etc. it could be suggested that there exist mutually defining identities. This is also reflected in statements such as "... they all dress in a similar way" (Informant 1, personal communication, November 30, 2012). However, although my interviews and observations seem to point in the direction of mutually defining identities, discussing this indicator more extensively than simply outward appearances would ideally require further research.
9. *The ability to assess the appropriateness of actions and products*: This is another vague indicator. Further, the term appropriateness carries certain normative problems with it that have no clear answers and are difficult to assess. E.g. many Yahoo boys seem to condemn the corruption of the Nigerian government, while at the same time conducting Internet fraud. The interviews did reveal some points regarding what is appropriate behavior in the COP, e.g. sharing knowledge, working together on problems, not stealing from others and not informing the authorities (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12; Informant 4, personal communication, December 14). However, the interpretive nature of indicator 9 means that I do not view it as a decisive indicator in telling whether a COP has formed or not.

### **5.3.3 Shared repertoire**

10. *Specific tools, representations and other artefacts*: The Yahoo boys usually employ the same tools, e.g. laptops, USB modems and mobile phones. This also applies to software and websites used for Internet fraud (Informant 2, personal communication, December 1, 2012). In fact, the name Yahoo boys does as explained in section 2.2 derive from their arguably most important tool – the Internet. Other tools and artefacts that are common for

some Yahoo boy COPs are those included in Yahoo Plus (or +Yahoo). Yahoo Plus is basically the inclusion of spells, potions, magic artefacts and local religion in order to enhance the results of Yahoo Yahoo. Although Yahoo Plus has not been given a considerable amount of emphasis in this thesis, it seems that the popularity of spirituality and religion in Nigeria contributes to the phenomenon being quite widespread among the Yahoo boys (Informant 3, personal communication, December 12, 2012; Informant 4, personal communication, December 14, 2012). Some artefacts that are common in Yahoo Plus are e.g. rings, specific types of clothing, charms, and even live animals and human body parts (Informant 2, personal communication, December 1, 2012).<sup>40</sup>

11. *Local lore, shared stories, inside jokes, knowing laughter*: This indicator was observed to be met on the tour of the university grounds described in section 5.1.2. The student who showed me around took me to a bar at campus around noon to have some refreshments. A group of alleged Yahoo boys the student was acquainted with were sitting at a nearby table. They asked the student in the local Yoruba language if I was a “maga,” i.e. a foreign victim he had brought to the university in order to dupe. This was followed by laughter and most likely several inside jokes and stories. The student later told me a local lore of a man from the US who had been convinced to visit the university in order to buy a building from a Yahoo boy who had forged papers of ownership. The deal was only cancelled in the last minute when staff from the university noticed the visitor and asked what he was doing. Such local lores and shared stories seemed to be prevalent among the Yahoo boys. Although one tour of the university ground surely is not enough to confirm this indicator being met, stories about different Yahoo boys were also provided during the interviews.
12. *Jargon and shortcuts to communication as well as the ease of producing new ones*: So far in this thesis, several jargons and shortcuts have already been mentioned, e.g. Yahoo, Yahoo Yahoo, Yahoo boys, maga and woike. Informant 2 provided another example: “They call it tools. ...when they are talking about tools they are talking about Liberty Reserve, MasterCard, some software online, and dating sites ...” (personal communication, December 1, 2012). Statements such as “maga just paid” or “the guy just hammered out” connote that an instance of Internet fraud has successfully been completed. Another example from the interview with Informant 2 was “so as they are you know, climbing the ladder they will be harden the Plus, harden the Plus, are you getting it” (ibid.). This means that Yahoo boys who wish to increase their earnings and become

---

<sup>40</sup> See e.g. Agunbiade & Tittilayo (2011) for more information about Yahoo Plus.



more respected Yahoo boys (climb the ladder) will have to escalate their methods of Yahoo Plus (harden the Plus) by e.g. employing more powerful charms, potions, etc. Agunbiade argued that "... they have their own terminologies, they have their own way of also conversing their prospects" (personal communication, December 14, 2012). A more thorough exploration of the Yahoo boys' jargons is likely to uncover a plethora of shortcuts and slang words.

13. *Certain styles recognized as displaying membership*: Informant 2 explained some of the styles common among the Yahoo boys:

I don't know if you know about this hairstyle Balotelli? You know, these traits, you know, it's very exclusive to all these boys. ... they dress just like in America, you know. The way they spend money in the club ... you know that they are big boys. Smoking and all that (personal communication, December 1, 2012).

Balotelli is an Italian football player notorious for his extravagant conduct (both on and outside the football field), eye-catching hairstyles and expensive attire. By "dress just like in America," Informant 2 is referring to stereotypical hip-hop attire, which includes e.g. saggy trousers, expensive shirts and overstated jewelry. Spending money in the club is also behavior commonly observed in the lyrics of popular rap songs and associated music videos, both in the US and increasingly common in Nigeria, as discussed in section 2.2.3. Informant 4 further argued "that is the way you check them, when you see a guy under thirty and still riding a big car" (personal communication, December 14, 2012). Agunbiade provided additional insights:

... when we look at their lifestyles in terms of they want to appear very loud. I'm using the word loud in quotes now, in terms of their appearance, in terms of the kind of cars they use, even in their dressing they want to make people feel that they have actually made it. And that again takes us back to what again we define as success in itself (personal communication, December 14, 2012).

Most members of Yahoo boys COPs thus display their membership by projecting a successful image, by dressing in expensive clothes, wearing jewelry, driving big cars, and generally appearing to be flashy and extravagant.<sup>41</sup>

---

<sup>41</sup> An exception was provided by Agunbiade (personal communication, December 14, 2012) who noted that some Yahoo boys – in particular the older ones – prefer to keep a lower profile than the younger generation.

14. *A shared discourse reflecting a certain perspective on the world:* The Yahoo boys' perspective on the world will be discussed on the basis of vocabulary and expressions. Informant 3 stated that "thinking of the history of Nigeria we have actually been cheated a lot. Now, a lot of us don't say this, but we actually feel very cheated" (personal communication, December 12, 2012). The other informants mainly disagreed that colonial powers had "cheated" Nigeria, but noted that many Yahoo boys justified their acts this way. The word "stolen" was usually employed to describe the actions taken by the former British colonial power, while the Yahoo boys "collect" money. Informant 2 explained that the Yahoo boys used phrases such as "taking back money from foreigners who have stolen from them" (personal communication, December 1, 2012). Although less information is at hand in regards to the Nigerian government, it seems that many Yahoo boys are using words such as "corrupt" to voice their opinion on the government.

In section 2.2.3 I examined how the Yahoo boys use the word "greed" to pass some of the blame onto the victims themselves. E.g. Informant 4 argued that "the white man himself is a thief, because he has been greedy!" (personal communication, December 14, 2012). Thus, the Yahoo boys justify their actions by arguing that the victims are just as guilty as them. In section 2.2.3 I noted that even Nigeria's high commissioner in 2008 voiced a similar opinion, thus strengthening the belief that this could be a quite common notion in Nigeria.

Another interesting word is "maga" (or "mugu"), which as previously explained is used to describe the victims, and directly translated means "the fool" or "idiot." This term could perhaps stem from the early days of Yahoo Yahoo, when the children of wealthy Nigerians were sent to Europe for studies. Although they were said to conduct credit card fraud in order to attain funds, most of it is believed to have been spent on partying and luxury items. Thus, in the early stages of Yahoo Yahoo, "fooling idiots," was something also done for fun and excitement. Informant 3 explained:

There's this pride in them. That they feel like 'are you smarter than me?' A Nigerian guy. They believe nobody is smarter than they are. So some people don't actually do it for a means of livelihood, person don't do it for the income.

If the above is combined, it could be argued that the Yahoo boys believe that due to a corrupt and egocentric government, their only means of survival is to dupe greedy fools from countries that have stolen from them in the past, and now deserve to become victims of theft themselves. It is of course difficult to confirm that members of each individual

Yahoo boys COP share a common discourse and perspective on the world. Further, these issues are likely to be considerably more nuanced than proposed above. A more in-depth discourse analysis could investigate this further and would likely reveal interesting insights.

#### **5.3.4 Other characteristics and modes of organization**

Although the above characteristics seem to be the norm among the Yahoo boys, there are also some exceptions. As described in section 5.1.1, new technologies such as USB modems have enabled the Yahoo boys to choose virtually any location for conducting Internet fraud. Informant 1 noted that “they do it from home because they have modems” (personal communication, November 30, 2012). Informant 2 also argued “... but now all they need to do is just buy the modem. In their home they get a small generator, to generate power, light, because you know, light is not consistent ...” (personal communication, December 1, 2012). Informant 2 further added that “some people are so rich that they even stay in the hotel permanently. ... They will stay there permanently, paying every day. Are you getting it, they are making their money.”

Another development is that older individuals who do not possess computer skills employ youths to conduct Yahoo Yahoo for them. Informant 4 (personal communication, December 14, 2012) explained:

And the old man too wants to join them, but because of the advancement in computer training they could not learn. ... So what they do most of the time is that they are like their godfather. ... Once the boy makes this money they be on percentage.

Similarly, Yahoo boys who have attained enough funds from Yahoo Yahoo expand their operations by providing computers to other youths. Informant 2 (personal communication, December 1, 2012) explained:

They will have all the connection, all the contact. ... They will buy like maybe six or ten laptop. They bring some few guys, you know, that doesn't have job. They are just walking around and all that, you know. They bring them together and train them and they will be working for the person. ... ‘Oh you, you face transfer, you be collecting the money,’ those guys will be on the laptop 24/7. They will be browsing, doing things.

However, it should be noted that the above scenarios are perceived to be quite rare exceptions, especially the examples of those purchasing computers and collecting a

percentage from the returns of Yahoo Yahoo. While quite a few Yahoo boys could conduct Internet fraud from home, it is mainly believed to be in addition to their regular socializing in the COP. More research is, however, required in order to explore if new technologies will affect the popularity among the Yahoo boys to organize in a COP in the coming years.

## **5.4 Discussion of question 1**

In this chapter I have presented empirical data relevant for question 1: “What characterizes the organization of the Yahoo boys?” In section 5.1, I argued that the massive growth of Internet cafés following the democratic elections in 1999 was a key development for the organization of the Yahoo boys into COPs. The political, economic and cultural aspects outlined in section 2.1 should also be included as factors leading to the rise of the general Yahoo boys culture. Although the popularity of Internet cafés was reduced after the EFCC’s crackdowns in 2006 and the introduction of USB modems, the interviews revealed that the Yahoo boys COPs retained most of their characteristics in new locations such as universities.

In section 5.2, I presented the process of entry into the COP. The interviews revealed that this process usually consists of an apprenticeship period. Lave & Wenger's (1991, p. 51) concept of *legitimate peripheral participation* was suggested to be a fitting model for analysis. Personal relations were presented to be a key requirement for becoming an apprentice in the COP. The apprenticeship period is believed to strengthen the COP by ensuring that members are motivated, skilled and able to trust each other. In section 5.3, I compared Wenger's (1998, pp. 125-126) 14 indicators of a COP having formed with the empirical data.

In conclusion, the organization of the Yahoo boys is argued to be in accordance with the COP theory. However, since the concept of COPs as previously mentioned is “... endowed with a large degree of interpretative viability” (Murillo, 2011, Introduction section, para. 1), it should be noted that the works of Lave & Wenger (1991) and Wenger (1998) are perceived to be the most relevant. If more detailed research was to emerge on the Yahoo boys, Brown & Duguid's (1991) ideas could also prove to be fruitful, especially their writings on collaborative problem solving through storytelling. Their egalitarian view of the members of the COP could, however, prove to be somewhat misleading. More in-depth research could as previously noted perhaps also benefit from being viewed through the merging of the COP theory with actor-network theory (ANT) and Foucault’s theories on the relationship between power and knowledge (as proposed by Fox, 2000).

The strong personal relations among the Yahoo boys, their gathering around specific locations and informal composition, are perceived to be among the most important characteristics of their organization. The process of apprenticeship means that the Yahoo boys COPs are not organized in an egalitarian fashion. Rather, informants pointed to a certain hierarchy within the COP. However, once apprentices have become full members of the COP (young masters/masters), they should generally be viewed as friends with varying experience and status, rather than a hierarchy of e.g. managers and employees.

#### **5.4.1 Potential limitations and weaknesses**

The most notable weakness with this chapter is that my empirical data is grounded on interviews with informants who could have generalized some of the processes based on their various experiences and/or information acquired by others. Although the Yahoo boys in some sense make up a quite homogeneous group, section 2.2 pointed to a certain heterogeneity as well. For section 5.2, this means that the process of entry could vary among the different COPs, ranging from strict apprenticeships to more informal ways of gaining membership. In section 5.3, the 14 indicators could have been met by the overall Yahoo boys population, rather than the individual communities based around an Internet café, classroom, student housing area, or similar meeting place.

A perhaps more beneficial solution would be to interview members from clearly identified COPs. In this way, the empirical data would be based on actual COPs, which could be compared in order to provide new insights.<sup>42</sup> Additionally, Yahoo boys who are not part of a COP, but e.g. conduct Internet fraud at home or on provision for others, should also have been interviewed. However, for my research this option was not viable due to the significant challenges of access, cost and safety. Although I do believe that the findings in this chapter provide a fairly accurate description of the organization of the Yahoo boys, more research is required to fully uncover the phenomenon.

---

<sup>42</sup> Covert research could possibly lead to the most fruitful insights. However, this would not only be controversial (e.g. Hammersley & Atkinson, 2007, pp. 53–58), but could also involve substantial risks for the person conducting the research.



## 6 Empirical findings and analysis – Part 2

In chapter 5, I argued that the majority of the Yahoo boys are believed to be part of a COP where they exchange knowledge, work together, and socialize. Thus, most of the Yahoo boys' skills are believed to be influenced by the organizational context and culture of the COP they belong to. However, the Yahoo boys also depend on interactions with individuals outside of the COP in order to conduct certain types of Internet fraud. In this chapter I will therefore explore question 2: "What skills and knowledge are common among the Yahoo boys and how are they shared? What skills, tools and services are procured externally?"

### 6.1 Skills and knowledge found among the Yahoo boys

#### 6.1.1 The Yahoo boys' skills and knowledge

Although conducting Internet fraud at first thought could be perceived as relatively simple, Informant 2 argued that it involves more than simply a laptop and an Internet connection:

... you can't just wake up one day and say 'I want to be a Yahoo boy' and start doing a lot of things, buy laptop, do this and that. It doesn't work out that way. People must show you the way, how they do it (personal communication, December 1, 2012).

The process of apprenticeship described in section 5.2 and the generally strong focus on personal interaction among the Yahoo boys, already provide some clues on the type of skills required to conduct Yahoo Yahoo. In fact, in chapter 5, I argued that there is little interest in online COPs among the Yahoo boys, where *explicit knowledge* could be stored and shared. Rather, the most important skills required in order to conduct Yahoo Yahoo instead appear to be of the *tacit* kind, amassed from personal experience in a specific context.

However, before someone will be proficient in Internet fraud, certain skills that could be classified as explicit are required. These include the basic knowledge of how to operate a computer, which tools are required and what websites to visit:

... before you can do Yahoo Yahoo you must know how to do what they call IP [Internet Protocol] switching and changing your IP addresses. Like I'm here, I'm using a computer here and I'm using the IP of Australia. So if you actually trace me you trace me to Australia. You wouldn't know where I am. So you must know a lot about computers ... [and] understand the loopholes in the web (Informant 3, personal communication, December 12, 2012).

However, the skills that rely on explicit knowledge only form the basis required for Yahoo Yahoo. They are the minimum requirements, but do not necessarily ensure success in Internet fraud. If an individual was provided with a detailed description of how to hide his or her identity, what websites to visit and how to contact the victim, the most important step is still left untouched: Interacting with the victim. This is where tacit knowledge plays a crucial role. Even the most detailed written-down information sheet covering potential conversations with the victim would probably not suffice, especially during fast-paced communication through e.g. social networking websites. Informant 3 (personal communication, December 12, 2012) thus argued that interpersonal skills are vital:

They key of Yahoo Yahoo is relationship. If I can make, if I can create a good relationship with you, I can make you trust me. And if you can trust me you can do anything for me ... So the major, the strongest tactic they use is relationship. Not really hacking anymore. Forget the computers. Now relationship. They now find out means of creating this relationship within text. So they can create that so you fall in love with the writer, and so you can do anything for the writer.

Informant 4 (personal communication, December 14, 2012) further elaborated on the skills of the Yahoo boys. He emphasized that the Yahoo boys are efficient at operating computers and the tools needed in order to conduct most types of Internet fraud, but that the majority do not possess technical skills such as software programming and hacking. Additionally, he accentuated that although skills that could be considered explicit knowledge are important prerequisites, most Yahoo boys focus on employing their interpersonal skills and creativity in order to dupe the victim:

Now, a Yahoo Boy does not have any programming skill, no he doesn't have time for that. He knows how to use those programs effectively, but doesn't know how to write those programs. If you give a Yahoo boy Yahoo Messenger, MSN [both of these are instant messaging/chat programs], he can tell you one thousand thing he can do with that, those softwares. ... They know virtually all the websites in the world, they know virtually all the dating sites in the world. ... Ask them how many IPs do you have in the world and then they will tell you. Ask them this IP uses, this is US this is UK, they know all those stuffs. If they see credit card they know. If they see a genuine credit card they know. If they see an invalid credit card they know. All these things they know. All these things they are perfect at doing. ... what they think about most times are what are those things that you want to hear. ... What can I tell you that will change your life? ... Then he starts building on that, little by little by little, do you understand?



The he catches you, he gets on you. Then he starts frauding your money. They are very good at that (Informant 4, personal communication, December 14, 2012).

### **6.1.2 The influence of the organizational and cultural context**

As noted in section 3.3, Wenger (2001) defined learning as “... a dynamic, two-way relationship between people and their communities. It combines personal transformation with the evolution of social structures” (p. 2341). Newell et al. (2009) argued that “... knowledge – or claims to knowledge – are social as well as individual and depend heavily on the organizational and cultural context in which such claims are made” (p. 5). Thus, the context the Yahoo boys exist in probably influences not only how they learn, but also what they learn.

Although the following includes some speculation in addition to empirical data, I propose several reasons for why the Yahoo boys focus on the skills mentioned in section 6.1.1: (I) As discussed in sections 2.1 and 2.2, the prevalence of 419 in Nigerian society is likely to have had an effect on what types of fraud are common. One characteristic of 419 is that the victim usually is deceived into trusting the perpetrator. This has also been observed to be important in Yahoo Yahoo, where most types of Internet fraud such as advance fee fraud, Nigerian letter fraud, and Internet dating and romance fraud rely on the victim developing some sense of trust for the perpetrator. It is therefore of major importance that the Yahoo boy is skilled in the art of interpersonal relations and the creation of narratives that the victim will find convincing.

(II) Although a number of Nigerians were trained in the use of computers after the democratic elections in 1999, the newest technology and fastest Internet connections are still believed to be available to a small set of the population only. Yahoo Yahoo is therefore based on the usage of computers and the Internet, but it does in most cases probably not involve the most technically demanding methods such as hacking, phishing and pharming.

(III) The goal among the Yahoo boys of “living large” creates a focus on fast and easy money. As argued by Informant 4, “for an hacker to be successful he might be on it for a year. A Yahoo boy wants his money within one week or two. The patience is not there” (personal communication, December 14, 2012). Thus, although a successful instance of more sophisticated fraud might lead to a bigger payout in the end, the Yahoo boys seem to prefer frequent earnings through less technically complex types of fraud.

(IV) The influence of spirituality and religion – primarily the briefly discussed phenomenon of Yahoo Plus – could also have an impact. Several informants mentioned that the Yahoo boys who go into Yahoo Plus believe that while they will earn large amounts of

money, they are at the same time likely to die young as a consequence of e.g. upsetting spirits. Further, using Yahoo Plus is usually done in order to influence the victim in some way, and it is doubtful that the Yahoo boys believe Yahoo Plus would help in an instance of programming or hacking. Although Yahoo Plus has been briefly covered in this thesis, the phenomenon is widely known in Nigeria and could have significant impacts on several areas within Yahoo Yahoo.

## **6.2 Sharing skills and knowledge**

In section 6.1, I argued that interpersonal skills and other forms of tacit knowledge are of major importance when conducting Yahoo Yahoo. This does naturally have implications on how skills and knowledge are shared among the Yahoo boys. The question of how skills are shared has already been touched upon in several parts of this thesis, mainly in section 2.2 and chapter 5, which will be tied together with relevant insights below.

### **6.2.1 Sharing skills and knowledge in the COP**

As described in section 5.2, the apprenticeship process that many aspiring Yahoo boys go through is the first step in gaining access to the skills found in the COP. Within the COP, most of the skills are shared through the practice of Yahoo Yahoo itself. The empirical data indicates that learning and sharing of skills and knowledge occurs primarily through personal interaction, such as working together on instances of Internet fraud, or sharing stories and local lores.

In his ethnography of Xerox photocopier service technicians, Orr (1990) found that the exchange of stories and experiences through informal gatherings, proved to be more important arenas for training than the corporation's manuals and training courses. Similarly, the Yahoo boys also seem to primarily learn from the exchange of stories and experiences, rather than through written-down information or formal training courses. Meetings at cafés, bars and nightclubs are common, providing an avenue not only for socialization, but also for the exchange of skills and knowledge through storytelling. This applies both to members of the same COP, and as will be discussed later, also between Yahoo boys from different COPs.

Agunbiade argued that further reasons for the Yahoo boys' preference for personal interaction could be the illegal nature of the business, issues of trust, and the shared repertoire and culture of the COP:

It's actually something that I have to believe with trust. Trust in the sense that when you are getting new recruits you must also be good to ascertain that this person will not also go out there to go and diverge secretive information about how they operate and others. And I think it's also common even in other groups, even apart from the Yahoo Yahoo, at least for any group that acts as a syndicate or whatever, they will also have their own peculiar culture which is also transmittable but not clearly written as you have it in other groups (personal communication, December 14, 2012).

The primary forms of skills and knowledge that seem to be shared in an explicit format are copies of e.g. advance fee fraud letters and photographs that could be used in instances of Internet fraud. However, I could not find evidence of this material actually being collected and shared through e.g. a database. More research is required to shed light on this issue.

The sharing of knowledge in the Yahoo boys COPs seems to resonate well with the ideas found in the epistemology of practice, where knowledge is considered to be "... not a static embedded capability or stable disposition of actors, but rather an ongoing social accomplishment, constituted and reconstituted as actors engage the world in practice" (Orlikowski, 2002, p. 249). Informant 1 provided an example of knowledge exchange and learning happening through common practice:

So you have these young boys that sit in the cybercafs, ten, twenty of them ... if one has a problem when he's chatting with someone, he calls someone else and oh, 'how can I scam, what do I tell him, how can I go across him,' bla, bla, bla. ... Cybercafs became like schools where you had a large pool of knowledge together, and they had knowledge and knew where to go (personal communication, November 30, 2012).

Although this example portrays knowledge exchange and learning in an Internet café, the process is believed to be quite similar in e.g. a university setting. The main characteristic of this process is arguably that it is practice-based and somewhat pragmatic, with learning and knowledge exchange conducted on the fly. In combination with the exchange of stories and local lores, this method of learning and exchanging knowledge seems to be remarkably effective.

The Yahoo boys' form of practice-based knowledge exchange and learning could potentially not only be an effective method of gaining new skills, but also foster increased innovation and creativity. As mentioned in section 3.3, Brown & Duguid (1991) argued that "...through their constant adapting to changing membership and changing circumstances, evolving communities-of-practice are significant sites of innovating" (p. 41). This was

highlighted by Informant 4 who provided an example of how the Yahoo boys develop their skills through practice in the COP:

Now, there was a guy who somebody taught how to do Yahoo Yahoo. What the person taught him was 'ok, when you meet one online these are the things you should tell him.' ... But now when the guy makes his money he is now richer than that guy who taught him. And I now called him, 'come, how did you make it that this boy that teach you those thing, you are now richer than him?' He said: 'In Yahoo Yahoo they can't teach you everything.' Sure you get it. You learn some, you develop some, it's a learn thing. ... that idea came into him after when they taught him how to use the Internet properly. He developed that skill to do it in that way and he made his money. And that person too they would give him all that information, he would go and do his own. Do you understand? So it's a very very diverse thing. They use different methods; they use different ideas to collect money (personal communication, December 14, 2012).

### **6.3 External skills, knowledge and tools**

While it is fully possible for a Yahoo boy to conduct an instance of Internet fraud by himself, he is usually limited to certain schemes, as explained by Informant 2:

... the only one that you can finish yourself is dating. If you are dating somebody you try to, you know, convince the person to collect money. The person will send money to you directly, and at the end of the day they just go and collect the money and go spend it, they don't need anybody's ... any intervention or something (personal communication, December 1, 2012).

Other types of Internet fraud can require the assistance of individuals outside of the COP. This ranges from instances such as a web designer hired to create a fake website, a hacker paid to steal information or alter software, a bank employee who arranges safe withdrawal of money, or even someone in the government or police who provides official documents for a "business deal." Informant 2 explained that "... there is this network among them, you can't know everything, especially the hackers. They are not common. They are not common, it's not everybody that can do it" (personal communication, December 1, 2012). Therefore, rather than having access to all the skills or tools in the COP, the Yahoo boys rely on a variety of outsiders who they pay for their services. Informant 1 explained:

I have been in the army, and have the knowledge of shooting somebody. ... You don't need to know how the guns are made to know how to shoot. With them most of the time, all they have is the

knowledge of the crimes and how to commit the crime ... Now, you know the technical aspect, the websites and all that, most of the time they don't build it themselves. So they have constant suppliers. So the boy that wants to do the fraud he just tell him oh, 'go to that guy and he gives you the papers, go to that guy, he is the suppliers of licenses, go to that guy, he is the suppliers of computers, or you have a problem, your IP address, that guy sells supplies that bounces your IP address about.' ... It's a web, like a pyramid, so the guys in the middle they are just the ones that are known as Yahoo boys, are just the ones that do the talking and all that (personal communication, November 30, 2012).

### **6.3.1 Other Yahoo boys or criminals**

When utilizing skills, knowledge and tools found outside the COP, there is usually some sort of payment or commission involved. Therefore, trust becomes an issue. In the case of e.g. hiring a web designer or hacker with a good reputation, *competence trust* – as discussed in section 3.4 – is usually sufficient. In other cases, the introduction through a common acquaintance is necessary. Due to the apparent shortage of experienced hackers and the difficulty of acquiring e.g. credit card numbers, these services often have to be commissioned from individuals in another city, or even another country, thus requiring the use of telephone, email or social networking websites. Informant 2 clarified:

... there are some things I don't really need to see the person. Are you getting it? ... I might ask you 'I need a credit card with date of birth.' ... Just say 'ok, just add this person on Facebook and ask. Just add, hello, I'm from John.' 'Ok, what do you want?' 'I need the credit card with CC that is worth maybe ten thousand USD.' 'Ok, can you pay my, can you pay maybe one hundred dollar into this account and I forward it to you.' 'Ok.' 'Alright.' You know, you send the money and they send you the code. You don't even need to see the person. You just work with the code. But most time it's risky, but that is how the business is. Because you might end up, the credit card, you might just find maybe hundred dollar there (personal communication, December 1, 2012).

Informant 1 further elaborated on the connection to other countries by arguing that "there's a deep western connection in this crime that most people don't focus on. ... you see there are people, white guys, Americans, British people that supply them with credit card numbers. And they buy credit card numbers" (personal communication, November 30, 2012). Informant 4 explained that exceptionally difficult instances of hacking require the help of international hackers who are paid off to assist the Yahoo boys:

Bring the best technology; give them one week, because what they do, the big boys among them, if there is a technology that comes out now that is not allowing the person to make money, it's an advantage to them. Within one week they have guys over there [US, Europe or Asia] that they will pay through, double, 'break this technology for us.' Right, pay it up. Within one week they will get it (personal communication, December 14, 2012).

The above examples illustrate the hiring of external skills, tools and services via telephone, email or social networking websites. This is usually reserved for skills and knowledge that are considered rare and difficult to obtain, thus forcing the Yahoo boys to refrain from their preference of personal communication.

Parties, bars and nightclubs provide an avenue for face-to-face exchange of skills and knowledge between Yahoo boys from different COPs. Informant 2 (personal communication, December 1, 2012) explained:

Because if you have money now, maybe you just bought a Benz, maybe compressor. You go to the club, another guy you know, come with an ML. You know, you be like ok that guy, you know, 'ah that guy just hammered out. Maga just paid last month, ten thousand us dollars.' 'Which work the guy did he do?' 'Ah, the guy is doing maybe wiring,' that's transfer. Transfer you know, eh, so the guy is good ... So maybe when you get a good deal, you try to look into that kind of person. 'Ok. This deal, ok forty thousand USD. Yours is fifty percent, mine is fifty percent, ok we transfer it. The person we are asking, which account do you want to transfer to?' 'Ok this, this and that, this is how we do it. Hope there wont be any fuckup, everything work well ok.' You know? So next time, even if somebody is coming to the gather, 'how did you do it,' you know. 'Ah, that is Jono, that guy is very good,' or you know that kind of thing.

The above example describes a situation where two successful Yahoo boys that were not prior acquaintances meet and discuss methods of Yahoo Yahoo. This involves the exchange of skills and knowledge, and possibly even an agreement to work together on one or several instances of Internet fraud.

Lastly, there exist certain areas where individuals have specialized in the supply of services, documents and products to various criminal groups. Informant 2 described one such area in Lagos:

... Theres a place called Ololi. If you go there now you need Canadian passport, the fake one, you need it now now now, they will go inside, the will charge you. 'This is how much you pay,' they will bring it.

If you need American passport, they will bring it. They will change the face there and put yours. If you have the guts you can travel with it, anything. If you bring any signature, even Obama signature. They're ok, 'this one I want to sign this signature on this check.' Somebody will come, they would not practice. They would just look at it like this and they will put it there, it will just be as if they photocopied it. Are you getting it. Any fake check of any bank. ... anything you need, any letter, you know, go and bring letter from the ambassador, the president, they will write it for you there. Any kind of drug, any kind of fraudulent act, anything ... (personal communication, December 1, 2012).

### **6.3.2 Legitimate businesses and services**

While some of the external skills and knowledge are procured from other Yahoo boys or criminals, the legitimate business sector also plays a prominent role. Informant 1 argued:

... you always have to differentiate the trade from they are the criminals, and they are these suppliers of the criminals. Suppliers of the criminals are usually legitimate business people with technical knowledge. It's not that they don't know that they are criminals. A lot of times they are aware but they turn a blind eye. And they just say 'oh, I'm just selling software to him, just getting software and stuff like that' (personal communication, November 30, 2012).

A first-hand example of how a legitimate business can assist the Yahoo boys was provided by Informant 4:

I'm a hardware engineer. I repair laptops, that is what I do basically for a living. ... Bring it, I fix it for you. Hardware, to any length, to any extent. Do you understand? Now, I have an advantage of dealing with everybody. Either the right guy or the wrong guy. If you're using your laptop for programming, if it breaks down, you bring it to me, I fix. If you are using it for Yahoo Yahoo, Yahoo Plus, what have you, you bring it to me, I fix. You understand? In the process of fixing I see a lot of things. Are you getting it? A lot of informations. If I bring my laptop now I can show you over 1000 pictures of different girls these boys use. I have different videos that I keep. Do you understand? Because one of them at times will come and say 'guy, do you have this, this, this, this, picture? We are ready to pay you.' ... And some of them would tell you 'before I can give you my laptop to repair you must have this, this, this, this. If you don't have I won't give you my laptop to repair because you cannot give it to me when you erase all these things from my laptop.' Do you understand? And if I say 'no, I can't give you,' they push me out of the market. Next time they are coming to fix their laptop they don't come, they go to somewhere else. Which me I cannot afford to loose because Nigerian government, I'm a

graduate, Nigerian government did not employ me. The only thing I can do is what I have known to do – repair. I don't browse [conduct Internet fraud]. I repair laptops. ... So, that is the way where I get all those informations. And at times when they come to my shop they discuss all these things (personal communication, December 14, 2012).

The services extend to a variety of sectors, not only in computer software and computer hardware, but also “special favors” by e.g. employees in banks, the government, police, customs, judiciary, transport sector and telecom (Informant 2, personal communication, December 1, 2012; Informant 4, personal communication, December 14, 2012). In these cases, *commitment trust* ensures that both parties keep their part of the deal, usually by the Yahoo boy paying a share of his earnings. As noted by Informant 5, “you will see some police where they encouraging them because they get a cut from there” (personal communication, December 14, 2012). Informant 4 further explained the process in banks:

The question is how do I collect the money? It's the easiest the way I have done. They go to the bank, the manager themselves give them fake address. 'Write this, write that.' They have percentage, 70/30 at times, at times 75/25, at times 80/20, at times 60/40, depending on the agreement. So they collect the money, they move. The manager to collect his own share, everybody is happy. The manager knows it's not Nigerian money. Nobody is coming for questioning. The boy knows yes at the same time it's not anybody's money – it's free money. So nobody's asking any question (personal communication, December 14, 2012).

In addition to the examples above, there is even a role for religious elements. Informant 4 argued that “some of them take their laptop to all these herbalists [indigenous medicine practitioner]. Yes! They start praying on the laptop” (personal communication, December 14, 2012). During informal conversations in Nigeria I was also told stories of Christian priests who sold additional praying and blessings to Yahoo boys. In fact, if viewed on a macro scale, almost every part of the Nigerian economy is somehow financially connected to Yahoo Yahoo. As argued by Informant 2 “the whole economy, are you getting it, they are making money” (personal communication, December 1, 2012). Mapping the effects of Yahoo Yahoo on the Nigerian economy is out of the scope of this thesis, but would be an interesting area for future research.



## 6.4 Discussion of question 2

In this chapter I have explored the question of “what skills and knowledge are common among the Yahoo boys and how are they shared? What skills, tools and services are procured externally?” I argue that the Yahoo boys are required to possess a certain amount of technical skills in order to conduct Yahoo Yahoo successfully, but that few of them boast more advanced skills in areas such as computer software programming and hacking, web design or computer hardware repair. In general, knowledge that could be labeled as explicit is only seen to provide the foundation for the Yahoo boys’ methods. The most important skills are arguably those that are embedded into the practice of the COP itself. These include interpersonal skills and other forms of knowledge that could be described as tacit.

In section 6.2, the sharing of stories and local lores was found to be an important way of learning and distributing skills and knowledge. Further, the Yahoo boys often work together on instances of Internet fraud. This enables them to build on each other’s skills and learn in a practice-based environment. The strong sense of community among the Yahoo boys and effective communication through the use of jargons and shortcuts is also likely to foster effective sharing of skills and knowledge.<sup>43</sup> While authors such as Nonaka & Takeuchi (1995) and the subsequent management literature often emphasizes the conversion of tacit into explicit knowledge, this should arguably not be a goal for the Yahoo boys. Rather, their organization into COPs and use of practice-based learning means that they have shown a remarkable ability to effectively share tacit knowledge.

In section 6.3, I discussed how the Yahoo boys also rely on outside knowledge for certain types of Internet fraud. This was identified as an external network that consists of three main groups:

(I) Other Yahoo boys who are introduced face-to-face at informal gatherings such as parties, bars and nightclubs: These scenarios usually involve the exchange of skills and knowledge through the sharing of stories, agreements of cooperation on instances of Internet fraud, or exchange of contacts that can provides tools or services.

(II) Experts such as programmers, hackers, graphic designers and computer repair specialists: Due to the lack of these individuals and their location in major cities or foreign

---

<sup>43</sup> Further research could explore this aspect against e.g. Simonin’s (1999, as described in Fagerberg, 2005, p. 75) arguments, where it was suggested that tacit knowledge could become “... more explicit as partners develop a wider bandwidth of communication” (Fagerberg, 2005, p. 75).

countries, they are often contacted via telephone, email or social networking websites – although preferably through a common acquaintance or on the basis of competence trust. These individuals can be hired for their skills, tools or services on a regular basis or only once. There is usually no exchange of skills or knowledge, but rather payment for the tools or services provided. These specialists are found both among other criminals, and in the legal sector.

(III) Employees in e.g. banks, the government, police, customs, judiciary, transport sector and telecom: These individuals are connected to the Yahoo boys through commitment trust and a long-term agreement of e.g. the payment of a share of the Yahoo boy's earnings. Similarly to the prior group, these individuals also usually provide tools or services rather exchanging skills and knowledge with the Yahoo boys.

## **7 Empirical findings and analysis – Part 3**

In this chapter I will discuss the question “what are the main innovations that have taken place among the Yahoo boys?” Although my informants provided a number of insights, this chapter should not be regarded as a complete overview. Rather, it is as an attempt to outline some of the most important developments. In order to enhance readability, the chapter has been divided into five main sections. In section 7.1, I argue that Yahoo Yahoo is a set of innovations, rather than simply an imitation of the “419ers” who conducted fraud through letters, fax and telephone before the introduction of the Internet. In sections 7.2, 7.3 and 7.4, I detail three of the Yahoo boy’s main methods of fraud and the innovations connected to them. Section 7.5 concludes the chapter with a discussion of the research question.

Three of Schumpeter’s (1942) five types of innovations will be given main emphasis in this chapter: New sources of supply, the exploitation of new markets, and new ways to organize business (Fagerberg, 2005, pp. 6–7). As discussed in section 3.1, innovation can be viewed in a strict sense or in a broad manner. Fagerberg (2005) argued that “innovation is the first attempt to carry it [an idea] out in practice” (p. 4). In the strict sense, something is only an innovation if it has never been done before. Anything else is instead labeled imitation. However, in the broad view of innovation, an imitation can be an innovation if it is introduced for the first time in an industry, or even a company (Fagerberg, 2005; Levitt, 2006). In this chapter I will employ the broad definition of innovation to argue that the Yahoo boys in fact are continuous innovators, adapting new technologies and ideas to their local context.

### **7.1 Yahoo Yahoo – A set of innovations**

In chapter 2, I argued that the US and Europe already were “markets” for the Nigerian 419ers who conducted fraud in the “pre-Internet era.” However, the costs associated with reaching these markets meant that only a limited set of Nigerians were able to conduct fraud abroad. The price of sending a letter or placing an international phone call also meant that there was a finite amount of Americans and Europeans who could be reached. The time it took to communicate through letters created additional limitations. After Internet access became more widely available, especially through Internet cafés, all of this changed. Not only did a whole new generation of Nigerians gain access to the US and European markets, but they could reach a much larger portion of it at a fraction of the previous time and costs.

While little is known about how the 419ers<sup>44</sup> chose their targets in the US and Europe, it seems that they preferred to target businesses in order to conduct fraud on the “very big scale,” or contact individuals on behalf of e.g. an “aid organization” they had set up to defraud money from donors (Informant 1, personal communication, November 30, 2012). This meant that instances of fraud that required lengthy communication between both parties mostly consisted of large-scale business fraud. The letters claiming to be from aid organizations were usually written in a manner to encourage a direct donation, requiring no communication. After the Internet was introduced, it is believed that most of the 419ers were not able to adapt their methods to the new technology introduced (ibid.).

When the Yahoo boys initiated their operations, some would perhaps argue that they simply transferred the 419ers schemes to the “digital age.” However, they did not simply utilize new technologies for conducting the same type of fraud, but targeted entirely new markets and adjusted their methods to the vast number of changes the Internet and interrelated technologies brought. Informant 1 argued that “the Internet cybercrime that people are talking about that got to the level at which people are talking about, is not from the boys that used to write the letters and stuff like that. ... it’s not the same set of people that committed that crime ...” (personal communication, November 30, 2012). As the next pages will reveal, it is reasonable to suggest that Yahoo Yahoo as a whole was a set of innovations, rather than simply an imitation of the 419ers schemes.

The rise of Yahoo Yahoo occurred in a time when the Internet and World Wide Web were new technologies. Most Internet users did not only know little about the Internet itself, but were IT novices in general. Email encryption, security systems for Internet shopping, and Internet-based money transfer were in the early stages. In many cases the Yahoo boys had a relatively easy time conducting Internet fraud. Today, a much larger percentage of the population is likely to be aware of common security risks such as replying to emails from strangers, entering credit card details on an unencrypted website, buying a product from an unknown seller, or logging into accounts on public computers. Informant 3 provided an example of how fast computer technology has evolved, and how skills and knowledge that were considered rare in the past, are commonplace today:

---

<sup>44</sup> As discussed in section 2.1.3, I am making a distinction between 419 and Yahoo Yahoo in order to avoid confusion. However, based on various searches performed on Google.com and websites visited, it seems that many use the terms 419 and Yahoo Yahoo synonymously (e.g. 419eater.com).

When computer first came out, you know Microsoft Word? Ok. You could pay me a huge amount of dollars because you would not understand. You could pay me, I'm not exaggerating now, let's say two thousand dollars to learn Microsoft Word. I will teach you Microsoft Word. Those days. Yeah and you would be happy, 'yes I'm a certified Word Microsoft.' 'Oh, you have a certificate that you know how to use Microsoft Word?' Actually my little sister can use Microsoft Word. So, so it's just like that. As information passes on people will get to understand and know that it's a lie (personal communication, December 12, 2012).

Informant 2 provided similar comments on the rapid evolution of technology:

Everything is improving. ... You know, years ago you had to write a letter, send it to somebody, the person would read it, reply, and post it to you again. ... Later on email comes in, you just have to send, bla, bla, bla, you know. And then later on even on your phone, are you getting it, like we have WhatsApp, Blackberry Messenger and all that. You just send, you send pictures, information and all that. So everything is improving. ... And even now, everyone sending, it's not everything they are sending on email. They can convey the same information even through maybe Yahoo Messenger, Facebook and all that.

The continuous improvement of technology has created both new challenges and opportunities for the Yahoo boys, requiring a constant stream of incremental innovations of their methods and selection of markets to exploit. Further, utilizing new sources of supply and new technologies in novel and unintended ways has been of importance. For instance, the early introduction of USB modems among the Yahoo boys allowed for new ways of localization and organization. It also provided them with extra security due to the modems being harder to trace, and enabled them to connect to the Internet in spite of frequent power outages (Informant 2, personal communication, December 1, 2012).

In order to further explore the research question, I will in the next sections detail three key Internet fraud methods and how the Yahoo boys have innovated in order to adapt to new challenges and opportunities.

## **7.2 Internet auction and credit card fraud**

In sections 2.2 and 5.1, I discussed the origins of the Yahoo boys. It was suggested that woike – or credit card fraud – was one of the first methods the Nigerian youths who studied in Europe initiated. While stealing a credit card or copying the information was relatively easy,

transferring funds from the stolen credit cards to their accounts is likely to have been a much more comprehensive task. This could have been a reason for the popularity of Internet auctioning fraud in the early days of Yahoo Yahoo, especially via the US auctioning website eBay. Informant 1 explained:

... they find ways of getting people's credit cards and use their credit cards to buy stuffs and send those stuffs down to Nigeria. And you know by the time the owner reports credit card fraud, those goods are already here and nobody can do (personal communication, November 30, 2012).

Informant 4 further elaborated on the process:

... when they started it wasn't money straight. When they started they buy goods. That's where it started from. It's buying goods. Phones, computer systems, accessories, different kind of things, TV sets, radios, ACs, online. ... And then they started like ok, let me see if I can make a few change. Then they were not doing it as a source of living. It was a freelance attitude that ok oh, I have ten bucks with me. Oh now I'm not going to get enough with these ten bucks, can I increase it to twenty? Ok, let me quickly get on the Internet, let me do some one or two things. Talk to one eBay guy, 'I want to buy this, I want to pay that, I will pay you next week.' They send the goods down, they don't pay. That was I'm sure you get it, that was how the whole thing started. So, it was when some boys discovered that see, there is money in this thing. Some people now made it their daily source of living, they now make it as their livelihood (personal communication, December 14, 2012).

Internet auction and credit card fraud was therefore not only one of the first methods the Yahoo boys employed, but it was also the result and cause of various innovations that will be outlined below.

### **The exploitation of new markets**

The Yahoo boys exploited a new market, which was businesses and individuals buying and selling products on the Internet. Although conducting auctioning and non-delivery fraud arguably was not an innovation in the strict sense, the Yahoo boys were quick to utilize these new Internet auction and shopping websites to conduct fraud. Buying products with stolen credit cards also allowed the Yahoo boys to circumvent the problem of how to transfer funds from stolen credit cards to their accounts. Their solution was to instead buy goods, have them shipped to Nigeria, and then sell them either directly to Nigerians or to local stores.

After the practice of having products bought with stolen credit cards shipped to Nigeria became more common, Nigerian customs officials allegedly began to confiscate a

number of shipments, even containers containing cars. Although this negatively affected the Yahoo boys who had their shipments confiscated, others were able to exploit the situation. The Yahoo boys' simply scammed other Nigerians by inserting adverts into newspapers (and later on social networking websites), where they claimed to represent the Nigerian Customs Service. Usually their scams involved selling cars or other high-value items that had been "confiscated" at significant discounts from the original price. Naturally, once the payment or deposit had been made, the victims never heard from the alleged Nigerian Customs Service (Famutimi, 2013; Olatunji, 2013). Thus, what seemed to be a negative development for some Yahoo boys did in fact prove a source of income for others who were quick to exploit this new domestic market.

### **New sources of supply**

The success of Internet auction and credit card fraud meant that the Yahoo boys began to actively source stolen credit card numbers, usually from Nigerians living in the US or Europe. Informant 1 further described how westerners also would be involved in the scams:

... there was this scam that started some time ago where they would chat with westerners and they ask the person to give him his credit card details and then they buy stuffs with his credit card and then he goes to declares credit card stolen. ... when he declares his credit card stolen, he is not responsible for the things that are bought. And the guy that defrauds them buys the credit card stuffs and his account and uses his account details and now sends him a percentage of the money. So it's a deep-rooted thing (personal communication, November 30, 2012).

Sometimes, the Yahoo boys would even convince their victims to join them so that they could have their losses repaid by defrauding other people.<sup>45</sup> Informant 4 explained:

And at times these white people too help them on their way. If they defrauded you of 10 000 dollars and now you've known that this thing is fraud, the boy here will now tell you that see: 'I have been defrauding you. Now I know you don't have money, but let us make some money together.' He will now start defrauding another person. By the time he defrauds that person is ready to send money to Nigeria. He will tell that person to send money to you. He will now be using, he will now robbing Peter to pay Paul. And by the time that person sends money he will tell that ok 'oh, now, you know that the money you sent me is 10 000 dollars. This boy have just sent 2000 dollars. Lets share it into two. You

---

<sup>45</sup> This can be arranged with victims of basically any type of Internet fraud, not specifically Internet auctioning and non-payment fraud.

give me one, you take one. There is going to be another next week, don't worry.' So it's still, because this money is still a free money he starts mixing his money. And you will be expecting money from this man, even if he tells you to call him and tell him he is real, you will still do it because you want to make back your money. So this thing keeps rolling (personal communication, December 14, 2012).

Over time, a number of new security measures were developed in order to prevent the use of stolen credit cards. For example, some credit cards could only be used in the region they were issued, and some Internet auctioning and shopping websites imposed restrictions on which countries they would accept customers from. The Yahoo boys were, however, quick in resolving these issues with the use of IP switchers and proxies. These technologies allowed the Yahoo boys to redirect their Internet connection through a server in the country of their choosing, thus circumventing the new security measures (Informant 1, personal communication, November 30, 2012; Informant 2, personal communication, December 1, 2012; Informant 3, personal communication, December 12, 2012; Informant 4, personal communication, December 14, 2012). Another security measure imposed was that items only could be shipped to certain countries. This was resolved by contacting firms or individuals who provided an address in for example the US, and then forwarded the items to Nigeria.

In addition to the new sources of supply detailed above, Internet auction and credit card fraud also required further assistance of individuals in sectors such as logistics, customs, police, banking, and retail. This will be further detailed below.

### **New ways to organize business**

Since Internet auction and credit card fraud is believed to be one of the first methods utilized by the Yahoo boys, it indirectly also contributed to the general rise of the Yahoo boys and their subsequent organization into various COPs. This has already been discussed in chapters 5 and 6, and will therefore not be elaborated further other than noting that their organization proved to be an innovative way of expanding their operations.

Although Internet auction and credit card fraud at first glance could be perceived as relatively simple, it does in fact include an impressive amount of supply chain organization. First, a credit card number has to be sourced. Even this first step has undergone several changes over the years by adapting to new technologies that allow the Yahoo boys to steal funds from e.g. PayPal accounts or utilize various types of virtual currencies (Informant 1, personal communication, November 30, 2012). Next, the products have to be shipped from e.g. the US or Europe to Nigeria. This does as mentioned above often require the cooperation



of someone living in the country of the victim, or a contact person in a logistics company who can re-route parcels to Nigeria. Further, to ensure that the product will pass through customs without any problems (especially in cases such as cars or other high-value items), a customs officer needs to be paid off. Once the item has arrived in Nigeria, the Yahoo boys either sell the product themselves, or they need to have an agreement with a store that buys the products from them. This does also in many cases entail a bribe to police officers. If the scam rather involves selling a non-existent product on a foreign auctioning site, this process could require a contact in a foreign bank that can receive the payment. While this is a far from complete picture of how such a supply chain can be organized, it provides an indication of the amount of organization required.

### **7.3 Nigerian letter and advance fee fraud**

Internet auction and credit card fraud arguably included a number of innovations, and was a fraud method the Yahoo boys introduced to Nigeria. In the case of Nigerian letter and advance fee fraud, the initial scams were clearly inspired by the 419ers schemes. However, over time, the Yahoo boys developed these schemes into something quite different from the previous scams, both targeting new markets and adjusting their methods to rapid technological change.

#### **The exploitation of new markets**

As mentioned in section 7.1, the Yahoo boys targeted the new markets the Internet allowed them to reach, thus already then differentiating them from the 419ers. The low cost of sending emails and fast feedback mechanisms allowed them to quickly adjust not only their schemes, but also decide who were the most rewarding targets. Thus, as argued in section 2.3.2, the Yahoo boys were able to figure out issues of false positives. This led to the Yahoo boys tailoring some of their emails to appeal to the most gullible part of the population. The market of more skeptical individuals was exploited by devising more comprehensive forms of scams, or by the use of schemes such as Internet dating and romance fraud, which seem to have the capacity to lure a larger set of the population. This focus on population research and targeting of markets is for instance used in the advertising industry, and has seemingly been adapted and modified by the Yahoo boys with great success.

Over time, the Yahoo boys ventured into new markets by using novel technologies such as BabelFish or Google Translate, which allowed them to translate their letters into numerous languages. Although this often led to far from perfect grammar, this did as

previously mentioned not have a significant impact on the most gullible part of the population. Some Yahoo boys also worked with relatives or acquaintances that lived in foreign countries to translate and adapt their methods to the local context (Informant 2, personal communication, December 1, 2012).

Another prominent development has been the Yahoo boys' expansion into Malaysia in order to reach the Asian and Australian markets. Informant 1 explained:

Malaysia is a corrupt country. ... And for a long time Malaysia has been a drug center. So being a drug center, a lot of drugs are carried from Nigeria to Malaysia and then to other Asian countries. So there has always been this connection between the criminal Nigerian and Malaysia. So, you know where one criminality prospers, there will also be the other crimes. It's just an easier environment for criminals. And then at a point it was easier for them to get visas for Malaysia through the educational programs in Malaysia. So what they usually do is claim they do a diploma, a one-year course in English or something. And they go there for that money and they do what they do. ... The average Nigerian that comes to Malaysia and he comes back, you ask him 'oh you come back from Malaysia with so many money.' How did he get the money? They don't ever talk about it (personal communication, November 30, 2012).

When I spoke to Informant 2 (personal communication, December 1, 2012), he had just returned from a one-year stay in Malaysia where he attended university. Although he did not claim to have conducted Yahoo Yahoo there, he provided a number of insights into life in Malaysia for young Nigerians. He explained that Nigerians were able to attend good universities at fairly reasonable prices. Further, the country is in close proximity to the increasingly lucrative Asian market (Symantec, 2012). In combination with police and government officials that could be paid off in the case of arrests, this provided a suitable environment for the Nigerian students to earn money on the side. However, the rise of Yahoo Yahoo in Malaysia has in recent years lead to conditions becoming more difficult for the Yahoo boys, e.g. with living costs going up for Nigerians, opening a bank account requiring comprehensive documentation, and the police being pressured to conduct more arrests (Informant 2, personal communication, December 1, 2012). It now seems that many Yahoo boys are relocating to other countries, both in order to continue their current operations, and to target new markets. Informant 4 explained:

Now they are running, they are coming, if you go to Lagos airport, if you go to airport now you will see hundreds of Malaysian guys [Nigerians who traveled to Malaysia] from Malaysia coming in every day

because they are running now. Because US government has given Malaysia an ultimatum, to clamp down on those boys. So they are leaving Malaysia. Now, once they come back this December, January, February they are going back to, they say they want to go to Cyprus, Qatar, whatever, they want to change their base now. So in the next one year they finish that country today, come back home, they go to another place. That is what they are doing. So you can't really stop them, you can't really track them down, you can't really catch them (personal communication, December 14, 2012).

### **New sources of supply and new ways to organize business**

These two types of innovation have already been detailed in chapters 5 and 6, and I will therefore only provide a brief overview. The first innovation is the novel organization of the Yahoo boys COPs themselves, which arguably is one of the reasons why they have been so successful. Nigerian letter and advance fee fraud does in some cases requires various forms of documentation in order to dupe the victim. This is where the network of government contacts or suppliers of falsified documents come into play. In order to receive payments, the Yahoo are dependent on not only other Yahoo boys in their COP, but contacts in banks and sometimes even foreigners who cash out checks for them in their country, or accept payments into their accounts, which then are forwarded to the Yahoo boy's accounts. A closer investigation would be likely to reveal a number of innovations in the sourcing of suppliers and the organization of business, and in many cases comparisons can be made to the supply chain presentation provided in section 7.2

## **7.4 Internet dating and romance fraud**

This type of fraud is clearly one of the most popular among the Yahoo boys at the moment. Not only is it relatively easy, but it does in most cases not require the same amount of suppliers or organization that some of the other methods of Internet fraud entail. Still, there are a number of innovations involved in Internet dating and romance fraud that will be outlined below.

### **The exploitation of new markets**

The general markets of the Yahoo boys have traditionally been the US and Europe, with Australia and Asia also becoming popular in recent years (Informant 2, personal communication, December 1, 2012). With the introduction of Internet dating and romance fraud, the Yahoo boys were able to tap new markets within those geographic areas. Although extremely diverse, the market of individuals looking for a partner could in many ways be said

to fit the Yahoo boys perfectly. Instances of Internet dating and romance fraud rely heavily on the Yahoo boys' skills in making the victim trust and eventually fall in love with the perpetrator, something that chapter 6 revealed them to be experts at. It is also a market where people's emotions play a big role, thus ending up including those who normally would be skeptical of e.g. Nigerian letter fraud.

### **New sources of supply**

Internet dating and romance fraud required several new sources of supply. First, it created a bigger role for females in Yahoo Yahoo. Informant 1 explained:

... they also get girls to make calls for them you know when they will be chatting and they call you and want to hear my voice. So they're like oh, 'all right sweetie, no problem,' one of the boys will get a girl to the phone and they talk to them (personal communication, November 30, 2012).

The Yahoo boys were quick to employ webcams and related software such as Skype. Informant 4 (personal communication, December 14, 2012) explained how some used webcams and video recording software in novel ways in order to record stock footage. This video footage could then be subsequently edited as needed and sent as messages to the victims. By claiming that their connections were too slow for real-time conversations, they could utilize the stock footage over and over again as e.g. "personal video greetings."

Another technology employed early on was Internet proxies (or IP bouncers). One of the schemes this tool allowed for was to pretend to be located anywhere the Yahoo boy wished. This could then be used to trick the victim into e.g. sending an emergency loan to the Yahoo boy who claimed to be stuck in a foreign country with all of his or her valuables stolen. Other uses include disguising one's real location when using e.g. Facebook Chat, which displays the location of the individuals chatting.

A further technology that the Yahoo boys adapted was the online mapping service Google Maps. Informant 1 explained:

Google Maps played a very crucial role ... what they do is they open Google Maps ... probably the girl you are chatting with is in New York. And she told you the particular area she is in, and you type in that and you know, you are chatting with her and you are like 'oh, I've been to New York before!' And he checks out cafes online and is like, 'oh, I've been to this café or this bar or this. Oh, you stay here! Oh, there's an ice cream parlor not far from here ... there's a coffee shop not far from here, and bla, bla, bla' (personal communication, November 30, 2012).

In some instances, the Yahoo boys are even able to extract the GPS coordinates from photos the victim has uploaded to an Internet dating website or social networking website. Then, by employing Google Maps and websites offering reviews and recommendations for e.g. local restaurants and cafés, the Yahoo boys are able to portray themselves as being from or having been in virtually any location.

Informant 1 noted that “lately because sites have become more advanced and sites tell you here are some conditions, and before you can join some sites you have to pay thousand dollars, and so dating sites, exclusive dating sites starting protecting themselves ...” (personal communication, November 30, 2012). However, even if dating sites require payments, most Yahoo boys are still able to pay for membership. As mentioned in section 7.2, the Yahoo boys were able to source credit cards from abroad through a network of suppliers. Informant 1 further revealed that the Yahoo boys could use these credit cards to buy new virtual currencies such as “e-gold” (ibid.). It would also be reasonable to believe that the Yahoo boys have embraced the virtual currency BitCoin, which in recent years has come under scrutiny due to its popularity among criminals to buy goods, services and launder money (Zetter, 2012).

### **New ways to organize business**

In general, Internet dating and romance fraud has not brought significant innovations in how the Yahoo boys are organized. Women have been given a larger role, but many Yahoo boys are able to pose as women themselves, using databases of photos and videos, as explained by Informant 4 in section 6.3.2. Since Internet dating and romance fraud is one of the only types of fraud the Yahoo boys can finish themselves, it has perhaps allowed for some decentralization in the organization among the Yahoo boys, e.g. working alone from home, as outlined in section 5.3.4. This development could, however, also result from new technologies and other changes, and is therefore difficult to attribute to one specific development.

## **7.5 Discussion of question 3**

In this chapter I have provided an overview of some innovations that have occurred on the basis of the three most common fraud methods found among the Yahoo boys. In general, the innovations among the Yahoo boys are difficult to pinpoint to an exact product. Rather, three of the five types of innovation suggested by Schumpeter seem to be most relevant: New sources of supply, the exploitation of new markets, and new ways to organize business (Fagerberg, 2005, pp. 4-9). Although the “product” of e.g. Nigerian letter fraud has been

developed over time, it is difficult to clearly identify the first occurrence of the fraud in a form that could be argued to be novel enough to be considered an innovation. Further complicating the discussion is that it depends heavily on how broad innovation itself is defined. In the strictest definition, there has perhaps not been a lot of innovation among the Yahoo boys at all. If a broader definition is applied, the innovations have been numerous.

The main finding in this chapter is that the Yahoo boys have been effective at continuous incremental innovation and rapidly finding solutions to new challenges that have surfaced. Rather than specializing in creating new products, they have utilized new sources of supply and new ways to organize business in order to overcome the challenges faced. Although it could be argued that most of their innovations are actually imitations, they have tailored the imitations to their needs and context in novel ways. Technologies such as Google Maps and Internet proxies have been redefined for application in Yahoo Yahoo, warranting the term innovation being applied. Levitt (2006) argued that "...imitation is not only more abundant than innovation, but actually a much more prevalent road to business growth and profits" (p. 1). In the case of the Yahoo boys, imitation (or innovation) has definitely led to business growth and profits.

Finally, the Yahoo boys have been effective at exploiting new markets that have presented themselves, and adapted their methods accordingly. During the last twenty years, the Internet has evolved in ways perhaps unimaginable when it was first introduced. Security measures have been continually enhanced. The general population's knowledge of the risks associated to using the Internet has improved dramatically. Still, the Yahoo boys' creativity and ability of rapid adaptation of new innovations to their specific context has enabled them to continue to defraud the world of billions of USD annually (Lewis & Baker, 2013; Symantec, 2011, 2012).

## 8 Concluding remarks

So far in this thesis, I have explored the three specific questions that were asked in order to limit the relevance of the overarching research question to the field of innovation studies. In this chapter, I will tie the thesis together in order to answer the overarching research question. I will begin with a brief summary of the three specific questions in section 8.1, and then discuss the overarching research question in section 8.2. The thesis ends with a short discussion of the research contributions, areas for further research, and what direction Yahoo Yahoo might take in the years to come.

### 8.1 Summary of the three specific research questions

Question 1, “what characterizes the organization of the Yahoo boys?,” revealed that most Yahoo boys become members of a community of practice (COP) through a process which Lave & Wenger (1991) termed *legitimate peripheral participation* (p. 51). A prominent characteristic of the Yahoo boys’ organization into COPs is their strong focus on mutual engagement, joint enterprise and a shared repertoire.

During the analysis of question 2, “what skills and knowledge are common among the Yahoo boys and how are they shared? What skills, tools and services are procured externally?,” I found that tacit knowledge such as interpersonal skills is imperative for the Yahoo boys. Sharing occurs through the practice of Yahoo Yahoo itself, frequent personal interaction and cooperation, and by exchanging stories and local lores. An extensive network of outside technical skills, tools and services was found to aid the Yahoo boys in their operations.

In the discussion of question 3, “what are the main innovations that have taken place among the Yahoo boys?,” I argued that the Yahoo boys’ innovations primarily consist of utilizing new sources of supply, exploiting new markets, and organizing business in new ways. Rather than creating entirely new innovations, the Yahoo boys adapt novel technologies and services to their local context and specific needs. In the end, the extent of the Yahoo boys’ innovative behavior depends strongly on how broad the term innovation itself is defined.

## 8.2 Discussion of the overarching research question

The overarching research question of this thesis is as follows:

*What are the main reasons for the Yahoo boys' apparent success in conducting Internet fraud?*

In order to explore this question, I began this thesis with a historical overview of post-colonial Nigeria. A central finding related to the research question was that 419 (or fraud), arguably embodies Nigeria's legacy of decades of military rule, government corruption, and poverty. Thus, the rise of Yahoo Yahoo is seen to be highly influenced by Nigeria's economic, political and cultural background. In section 2.2, I presented prior research in combination with some of my own empirical data, which argued that the Yahoo boys primarily consist of students in secondary or higher education.<sup>46</sup> Most Yahoo boys are therefore likely to be intelligent and educated individuals, who happen to live in a country that provides them with little hope for future employment and a better life.

In section 5.1, I drew on sections 2.1 and 2.2 to argue that when Internet cafés emerged in Nigeria, they enabled relatively cheap and easy access to the Internet. Nigerian youths with prior experience of conducting credit card fraud in Europe were quick to exploit the possibilities the Internet provided. Their methods and approach of organizing into tightly knit COPs were rapidly diffused to the wider population of Nigerian youths. Thus, Yahoo Yahoo was born. The Yahoo boys of today can be argued to consist of highly motivated individuals who work together in COPs that provided an avenue for the efficient exchange of skills, knowledge and learning. Although most Yahoo boys do not possess advanced technical skills themselves, they have been innovative in adapting their methods to their skills and knowledge, and exploited new markets and opportunities that have emerged. Further, they have utilized external networks of skills, tools and services when found necessary.

In conclusion, the main reasons for the Yahoo boys' apparent success in conducting Internet fraud – when discussed in the view of innovation studies – are as follows:

(I) The Yahoo boys' organization into COPs has enabled effective sharing of the tacit skills and knowledge that are central to their methods of Internet fraud. The apprenticeship process that most aspiring Yahoo boys are required to go through, enables learning through

---

<sup>46</sup> As noted in section 2.2.2 some uncertainty exists, especially since prior research and my own research was conducted at a university.



the practice of Yahoo Yahoo itself and builds important companion trust. The end result is a tightly knit COP characterized by mutual engagement, joint enterprise and shared repertoire.

(II) The Yahoo boys have effectively utilized new technologies and the opportunities they have provided, while at the same time adapting new sources of supply and ways of organization to their local context. Although it would be incorrect to label the Yahoo boys as great innovators in the strictest sense of the term, they have imitated in innovative ways and fostered an environment where “there is room for personal creativity” (Informant 5, personal communication, December 14, 2012).

### **8.3 Implications, limitations and further research**

With this thesis, I have attempted to fill a void in the innovation studies literature, where in-depth research on Yahoo Yahoo has been previously non-existent. The implications of the thesis could be numerous. Personally, the Yahoo boys’ success in turning imitation to innovation was particularly interesting. This could perhaps influence the view on what innovation entails and is defined, by showing that a multi-billion dollar industry has emerged on the basis of what those employing a strict definition of innovation arguably would simply write off as imitation. This thesis could further be relevant in fields such as knowledge management, where the Yahoo boys’ successful reliance on internal tacit knowledge and hiring of external explicit knowledge could be of interest. However, due to the broad theme of the thesis, it could have implications in numerous academic disciplines, and it will be interesting to follow whether Yahoo Yahoo could obtain the attention of more scholars. In general, I hope the thesis has provided deeper insights into the Yahoo boys themselves. The issue of Yahoo Yahoo is extremely complex, including numerous normative questions that have no clear answers.

It should be noted that this thesis only presents an early contribution to the literature. The scope of a master’s thesis poses certain limitations to the amount of empirical data it is possible both to gather and convey. Further, due to the difficulties in access to informants, the thesis should not be viewed as a complete guide to either the Yahoo boys or Yahoo Yahoo. As discussed in section 2.2, while the Yahoo boys in some sense are a homogeneous group, there are also major differences among them. Although I believe that generalizing the Yahoo boys in the way done in this thesis provides a sufficiently accurate picture, some uncertainty presides.

The possibilities of further research on the Yahoo boys and Yahoo Yahoo are numerous. In the field of innovation studies, one promising direction could be to apply an even stronger focus on the connection between Yahoo Yahoo and Nigeria's national innovation system (NIS). Such an evolutionary approach, as e.g. presented in Fagerberg, Mowery, & Verspagen (2009), could provide interesting insights and address one of the weaknesses of this thesis, which is the uncertainty of how significant Nigeria's economic, political and cultural history has been for the rise of Yahoo Yahoo compared to other factors. Although involving considerable difficulties, further research should also attempt to gain wider access to the Yahoo boys, and make efforts to map out individual COPs in order to gain further insights into how they are organized.

## **8.4 The future of Yahoo Yahoo**

As for the future of Yahoo Yahoo, this thesis has shown that new technologies or security measures are likely to have a limited effect on containing Internet fraud. Informant 3 argued:

For the techniques in Yahoo, I believe there will still be more techniques that will amend as technology advances. Now people use computers and the web to do their stuff. There will soon be hardwares that will be mutually for it (personal communication, December 12, 2012).

Informant 3 is making an important point, which is that our future is likely to be increasingly based on the Internet, paving the way for further increases in Internet fraud. In fact, the "Internet of things," a network of Internet-connected objects – from roadways to pacemakers – is already on its way (Chui, Löffler, & Roberts, 2010). Thus, rather than relying on new technologies to fight Internet fraud, a Nigerian student I spoke with suggested a different approach:

It's more of a social problem than a technology problem. So if you say you want to improve technology to cut people off from doing Internet fraud, boys will still come up with a solution to bypass whatever you are doing. So what I believe is it should be solved socially. We should kind of find out what actually caused the problem. If getting a job in the country is easier than Internet fraud, boys will shift. There won't be Yahoo Boys any more. Why? It's much more easier for me to get a job, work for it and get pay, good pay. Come on, why would I sit in front of a computer system looking for a guy that would not at the end of the day even pay me? And then police would be up on my neck for the rest of my life. ... to solve that problem from the social or from the non-technological way I think it will have more

effect than, than ok, building firewall there, firewall here. People will always break firewalls. All right, so that's what I feel (personal communication, December 12, 2012).

Tackling issues such as poverty, corruption and government mismanagement is therefore believed to be the most effective way of combating Yahoo Yahoo in Nigeria. The Yahoo boys' creativity and knowledge of the Internet would make them prime candidates for a number of jobs in for example the IT, security or advertising sectors. If the Yahoo boys expanded their skills into programming, they could even venture into the rapidly growing market of smartphone application development (Perez, 2013). This could bring the further benefit of allowing the Yahoo boys to work in their existing COPs, where creativity and innovation is perceived to flourish. However, while a lot of potential is found among the Yahoo boys, providing opportunities for them and resolving Nigeria's challenges is likely to be a prolonged process.

So what then, does the near-term future of Yahoo Yahoo hold? My informants' predictions were that Internet dating and romance fraud is likely continue breaking both hearts and budgets all over the world. Our emotions will always be there to exploit, no matter what security measures are introduced. As Informant 3 put it, "for most people, the world is all about relationship. It's all about love. And so the dating sites will keep making money and the Yahoo guys will keep making money" (personal communication, December 12, 2012).



## Reference list

- 419Eater.com. (2005). URGENT BUSINESS PROPOSAL. Retrieved October 07, 2012, from [http://www.419eater.com/html/user\\_subs/ubp/UrgentBusinessProposal.pdf](http://www.419eater.com/html/user_subs/ubp/UrgentBusinessProposal.pdf)
- Adaramola, Z. (2006). Nigeria: Cyber Café Operators Discontinue Night Browsing, Jerk Up Prices. *Daily Trust*. Retrieved October 07, 2012, from <http://allafrica.com/stories/200609181447.html>
- Adeniran, A. I. (2008). The Internet and Emergence of Yahooboy sub-Culture in Nigeria. *International Journal of Cyber Criminology*, 2(2), 368–381. Retrieved from <http://www.cybercrimejournal.com/adebusuyijccdec2008.pdf>
- Adomi, E. E., & Igun, S. E. (2008). Combating cyber crime in Nigeria. *The Electronic Library*, 26(5), 716–725.
- Aghatise, J. E. (2006). Cybercrime definition. Retrieved October 14, 2012, from <http://www.crime-research.org/articles/joseph06/2>
- Agunbiade, O. M., & Tittilayo, A. (2011). Spirituality in Cybercrime (Yahoo Yahoo) Activities among Youths in South West Nigeria. In E. Dunkels, G.-M. Franberg, & C. Hallgren (Eds.), *Youth Culture and Net Culture: Online Social Practices* (pp. 357–381). Hershey, PA: IGI Global.
- Aluko, J. O. (2006). *Corruption in the Local Government System in Nigeria*. Ibadan: BookBuilders - Editions Africa.
- Alvesson, M., & Kärreman, D. (2001). Odd couple: making sense of the curious concept of knowledge management. *Journal of Management Studies*, 38(7), 995–1018. Retrieved from <http://onlinelibrary.wiley.com/store/10.1111/1467-6486.00269/asset/1467-6486.00269.pdf?v=1&t=hl4vsnhf&s=b635e07c4f6a88c4e6ef347086ba240be5da0849>
- Apter, A. (2005). *The Pan-African nation: Oil and the spectacle of culture in Nigeria*. Chicago: University of Chicago Press.

- Aransiola, J. O., & Asindemade, S. O. (2011). Understanding Cybercrime Perpetrators and the Strategies They Employ in Nigeria. *Cyberpsychology, Behavior, and Social Networking*, 14(12), 759–763.
- Ayadi, O. F., Chatterjee, A., & Obi, C. P. (2000). A Vector Autoregressive Analysis Of An Oil-Dependent Emerging Economy — Nigeria. *OPEC Review*, 24(4), 329–349. doi:10.1111/1468-0076.00087
- BBC. (2011). Abuja attack: Car bomb hits Nigeria UN building. Retrieved October 26, 2012, from <http://www.bbc.co.uk/news/world-africa-14677957>
- BBC. (2012a). Nigeria's Boko Haram "bombed Kaduna churches." Retrieved October 26, 2012, from <http://www.bbc.co.uk/news/world-africa-18496285>
- BBC. (2012b). Nigeria blasts: Eleven dead at Kaduna barracks church. Retrieved November 26, 2012, from <http://www.bbc.co.uk/news/world-africa-20486998>
- Bereiter, C. (2002). *Education and Mind in the Knowledge Age*. London: Lawrence Erlbaum Associates.
- Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation. *Organization Studies*, 16(6), 1021–1046. Retrieved from <http://oss.sagepub.com/content/16/6/1021>
- Bradshaw, M., & Stratford, E. (2010). Qualitative Research Design and Rigour. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3rd ed.). Ontario: Oxford University Press.
- Brown, J. S., & Duguid, P. (1991). Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation. *Organization Science*, 2(1), 40–57. Retrieved from <http://www.jstor.org/stable/2634938>
- Brown, J. S., & Duguid, P. (2001). Knowledge and Organization: A Social-Practice Perspective. *Organization Science*, 12(2), 198–213. Retrieved from <http://orgsci.journal.informs.org/content/12/2/198>

- Bureau of Consular Affairs. (2013). Internet Dating and Romance Scams. Retrieved May 03, 2013, from [http://travel.state.gov/travel/cis\\_pa\\_tw/financial\\_scams/financial\\_scams\\_4554.html](http://travel.state.gov/travel/cis_pa_tw/financial_scams/financial_scams_4554.html)
- Bureau of International Narcotics and Law Enforcement Affairs. (1997). *Nigerian Advance Fee Fraud*. Retrieved from [www.state.gov/documents/organization/2189.pdf](http://www.state.gov/documents/organization/2189.pdf)
- Campbell, J. (2011). *Nigeria: Dancing on the Brink* (p. 192). Plymouth, United Kingdom: Rowman & Littlefield Publishers, Inc.
- Campbell, M., Verenikina, I., & Herrington, A. (2009). Intersection of trajectories: a newcomer in a community of practice. *Journal of Workplace Learning*, 21(8), 647–657. Retrieved from <http://www.emeraldinsight.com/journals.htm?issn=1366-5626&volume=21&issue=8&articleid=1819267>
- Carlile, P. R. (2002). A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development. *Organization Science*, 13(4), 442–455. Retrieved from <http://www.jstor.org/stable/3085976>
- Carlile, P. R. (2004). Transferring, Translating, and Transforming: An Integrative Framework for Managing Knowledge Across Boundaries. *Organization Science*, 15(5), 555–568. Retrieved from <http://orgsci.journal.informs.org/content/15/5/555.abstract>
- Carter, J. (2013). Why basic smartphones will win in the race for “the next billion” users. Retrieved May 03, 2013, from <http://www.techradar.com/news/phone-and-communications/mobile-phones/why-basic-smartphones-will-win-in-the-race-for-the-next-billion-users-1145720>
- CERN. (2013). Twenty years of a free, open web. Retrieved May 02, 2013, from <http://info.cern.ch/>
- Chang, J. J. S. (2008). An analysis of advance fee fraud on the internet. *Journal of Financial Crime*, 15(1), 71–81. Retrieved from <http://www.emeraldinsight.com/journals.htm?articleid=1641907>

- Chui, M., Löffler, M., & Roberts, R. (2010). The Internet of Things. *McKinsey Quarterly*. Retrieved October 12, 2013, from [http://www.mckinsey.com/insights/high\\_tech\\_telecoms\\_internet/the\\_internet\\_of\\_things](http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_internet_of_things)
- CIA. (2012). Nigeria. Retrieved August 28, 2012, from <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>
- Cloke, P., Cook, I., Crang, P., Goodwin, M., Painter, J., & Philo, C. (2004). *Practising Human Geography*. London: SAGE Publications Ltd.
- Contu, A. (2008). Communities of practice. In S. R. Clegg & J. R. Bailey (Eds.), *International Encyclopedia of Organization Studies* (pp. 211–214). Thousand Oaks, CA: SAGE Publications, Inc.
- Cook, S. D. N., & Brown, J. S. (1999). Bridging Epistemologies: The Generative Dance between Organizational Knowledge and Organizational Knowing. *Organization Science*, 10(4), 381–400. Retrieved from <http://www.jstor.org/stable/2640362>
- Cooper, H. M. (1984). *The Integrative Research Review: A Systematic Approach*. Beverly Hills, Ca: SAGE Inc.
- Cox, A. (2005). What are communities of practice? A comparative review of four seminal works. *Journal of Information Science*, 31(6), 527–540. doi:10.1177/0165551505057016
- CrunchBase. (n.d.). Yahoo! Retrieved May 12, 2013, from <http://www.crunchbase.com/company/yahoo>
- Cunliffe-Jones, P. (2010). *My Nigeria: Five Decades of Independence*. New York: Palgrave Macmillan.
- Dunn, K. (2010). Interviewing. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3rd ed., pp. 101–151). Ontario: Oxford University Press.
- Edquist, C., Hommen, L., & McKelvey, M. (2001). *Innovation and Employment: Process versus Product Innovation*. Cheltenham: Elgar.



- Eggesvik, O. (2013). 120 personer sendte 200 millioner kroner til svindlere i fjor. *Aftenposten*. Retrieved January 11, 2013, from <http://www.aftenposten.no/nyheter/iriks/120-personer-sendte-200-millioner-kroner-til-svindlere-i-fjor-7088744.html#.UZ9u32ROqMA>
- Ehimen, O. R., & Bola, A. (2010). Cybercrime in Nigeria. *Business Intelligence Journal*, 3(1), 93–98. Retrieved from [http://www.saycocorporativo.com/saycoUK/BIJ/journal/Vol3No1/Article\\_7.pdf](http://www.saycocorporativo.com/saycoUK/BIJ/journal/Vol3No1/Article_7.pdf)
- Elombah, D. (2010). The Nigeria Vision 20-20 is a Mirage. Retrieved April 08, 2013, from <http://elombah.com/index.php/section-blog/30-news/the-economy/3867-the-nigeria-vision-20-20-is-a-mirage-soludo-v15-3867>
- Encyclopædia Britannica. (2012). Ile-Ife. Retrieved December 28, 2012, from <http://www.britannica.com/EBchecked/topic/282720/Ile-Ife>
- Essers, J., & Schreinemakers, J. (1997). Nonaka's subjectivist conception of knowledge in corporate knowledge management. *Knowledge Organization*, 24(1), 24–32.
- Faems, D., Janssens, M., & van Looy, B. (2007). The Initiation and Evolution of Interfirm Knowledge Transfer in R&D Relationships. *Organization Science*, 28(11), 1699–1728. Retrieved from <http://oss.sagepub.com/content/28/11/1699>
- Fagerberg, J. (2005). Innovation: A Guide to the Literature. In J. Fagerberg, D. C. Mowery, & R. R. Nelson (Eds.), *The Oxford Handbook of Innovation* (pp. 1–26). Oxford: Oxford University Press.
- Fagerberg, J., Mowery, D. C., & Verspagen, B. (2009). *Innovation, Path Dependency, and Policy: The Norwegian Case*. (J. Fagerberg, D. C. Mowery, & B. Verspagen, Eds.). Oxford: Oxford University Press.
- Falola, T., & Heaton, M. M. (2008). *A History of Nigeria*. Cambridge, UK: Cambridge University Press.

- Famutimi, T. (2013). Car auction: Scammers create 35 Customs Facebook accounts. *Punch*. Retrieved October 03, 2013, from <http://www.punchng.com/i-punch/car-auction-scammers-create-35-customs-facebook-accounts/>
- Federal Bureau of Investigation. (n.d.). Common Fraud Schemes. Retrieved March 17, 2013, from <http://www.fbi.gov/scams-safety/fraud>
- Federal Bureau of Investigation. (2010). Mass-Marketing Fraud: A Threat Assessment. Retrieved October 17, 2013, from <http://www.fbi.gov/stats-services/publications/mass-marketing-fraud-threat-assessment>
- Federal Bureau of Investigation. (2013). Looking for Love? Beware of Online Dating Scams. Retrieved February 17, 2013, from <http://www.fbi.gov/sandiego/press-releases/2013/looking-for-love-beware-of-online-dating-scams>
- Fox, S. (2000). Communities Of Practice, Foucault And Actor-Network Theory. *Journal of Management Studies*, 37(6), 853–868. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-6486.00207/abstract>
- Gherardi, S. (2001). From organizational learning to practice-based knowing. *Human Relations*, 54(1), 131–139. Retrieved from [https://blog.itu.dk/MVOL-F2011/files/2011/01/supplerende\\_gherardi2001.pdf](https://blog.itu.dk/MVOL-F2011/files/2011/01/supplerende_gherardi2001.pdf)
- Glickman, H. (2005). The Nigerian “419” Advance Fee Scams: Prank or Peril? *Canadian Journal of African Studies*, 39(5), 460–489. Retrieved from <http://www.jstor.org/stable/25067495>
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597–607. Retrieved from <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- Google. (n.d.). Google Scholar. Retrieved September 10, 2013, from [scholar.google.com](http://scholar.google.com)
- Google. (2012a). Obafemi Awolowo University to Ibadan, Nigeria - Google Maps. Retrieved December 28, 2012, from <https://maps.google.no/maps?saddr=Obafemi+Awolowo+University,+Ife,+Osun,+Nigeri>

a&daddr=Ibadan,+Oyo,+Nigeria&hl=en&sll=6.982363,3.945086&sspn=1.818298,2.680664&geocode=FRq2cgAdDBFFACFSevW2B0\_wain7WWJe0TA4EDFSevW2B0\_wag%3BFSXccAAde8M7AClvCP\_ud405EDGpBI5u9-AzOw&oq=ibadan&mra=ls&t=m&z=11

Google. (2012b). Obafemi Awolowo University to Lagos, Nigeria - Google Maps. Retrieved December 28, 2012, from [https://maps.google.no/maps?saddr=Obafemi+Awolowo+University,+Ife,+Osun,+Nigeria&daddr=Lagos,+Nigeria&hl=en&sll=6.52976,3.386774&sspn=0.22751,0.335083&geocode=FRq2cgAdDBFFACFSevW2B0\\_wain7WWJe0TA4EDFSevW2B0\\_wag%3BFcZIYgAdeSc0ACnBgILmKos7EDHL2cNno4ee3A&oq=obafemi+awolowo+unive&mra=ls&t=m&z=9](https://maps.google.no/maps?saddr=Obafemi+Awolowo+University,+Ife,+Osun,+Nigeria&daddr=Lagos,+Nigeria&hl=en&sll=6.52976,3.386774&sspn=0.22751,0.335083&geocode=FRq2cgAdDBFFACFSevW2B0_wain7WWJe0TA4EDFSevW2B0_wag%3BFcZIYgAdeSc0ACnBgILmKos7EDHL2cNno4ee3A&oq=obafemi+awolowo+unive&mra=ls&t=m&z=9)

Gordon, S., & Ford, R. (2006). On the definition and classification of cybercrime. *Journal of Computer Virology and Hacking Techniques*, 2(1), 13–20. Retrieved from <http://link.springer.com/article/10.1007/s11416-006-0015-z>

Gourlay, S. (2003). The SECI model of knowledge creation: some empirical shortcomings. In *4th European Conference on Knowledge Management*. Oxford: Academic Conferences Ltd. Retrieved from <http://eprints.kingston.ac.uk/2291/>

Gourlay, S. (2006). Conceptualizing Knowledge Creation: A Critique of Nonaka's Theory. *Journal of Management Studies*, 43(7), 1415–1436. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6486.2006.00637.x/abstract>

Grabosky, P. (2004). The Global Dimensions of Cybercrime. *Global Crime*, 6(1), 146–157. Retrieved from <http://dx.doi.org/10.1080/1744057042000297034>

Gralla, P. (1998). *How the Internet Works* (4th ed.). Indianapolis: Que Publishing.

Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in Practice* (3rd ed.). Oxon: Routledge.

Hay, I. (2010). *Qualitative Research Methods in Human Geography* (3rd ed.). Ontario: Oxford University Press.

- Herley, C. (2012). *Why do Nigerian Scammers Say They are from Nigeria?* Retrieved from <http://research.microsoft.com/apps/pubs/?id=167719>
- Hesselberg, J. (2012). Fieldwork in developing countries - A short student guide. Oslo. Retrieved February 10, 2012, from Internal University of Oslo course site Fronter.
- Hildrum, J. M. (2009). Sharing Tacit Knowledge Online: A Case Study of e- Learning in Cisco's Network of System Integrator Partner Firms. *Industry and Innovation*, 16(2), 197–218. Retrieved from <http://dx.doi.org/10.1080/13662710902764360>
- Holt, T. J., & Graves, D. C. (2007). A Qualitative Analysis of Advance Fee Fraud E-mail Schemes. *International Journal of Cyber Criminology*, 1(1). Retrieved from <http://www.cybercrimejournal.com/thomas&danielleijcc.htm>
- Honan, M. (2012). How Apple and Amazon Security Flaws Led to My Epic Hacking. Retrieved October 01, 2013, from <http://www.wired.com/gadgetlab/2012/08/apple-amazon-mat-honan-hacking/all/>
- Hosking, D. M., & Morley, I. E. (1991). *A Social Psychology of Organizing: People, Processes and Contexts*. London: Harvester Wheatsheaf.
- Howells, J. (2002). Tacit Knowledge, Innovation and Economic Geography. *Urban Studies*, 39(5-6), 871–884. Retrieved from <http://usj.sagepub.com/content/39/5-6/871.abstract>
- Howells, J. (2012). The geography of knowledge: never so close but never so far apart. *Journal of Economic Geography*, 12(5), 1003–1020. Retrieved from <http://joeg.oxfordjournals.org/content/12/5/1003.short>
- Internet Crime Complaint Center. (n.d.). About us. Retrieved February 03, 2013, from <http://www.ic3.gov/about/default.aspx>
- Internet Crime Complaint Center. (2008). *2008 Internet Crime Report*. Retrieved from [http://www.ic3.gov/media/annualreport/2008\\_IC3Report.pdf](http://www.ic3.gov/media/annualreport/2008_IC3Report.pdf)
- Internet Crime Complaint Center. (2010). *2010 Internet Crime Report*. Retrieved from [http://www.ic3.gov/media/annualreport/2010\\_IC3Report.pdf](http://www.ic3.gov/media/annualreport/2010_IC3Report.pdf)

- Internet Crime Complaint Center. (2011). *2011 Internet Crime Report*. Retrieved from [http://www.ic3.gov/media/annualreport/2011\\_IC3Report.pdf](http://www.ic3.gov/media/annualreport/2011_IC3Report.pdf)
- Internet Crime Complaint Center. (2012). *2012 Internet Crime Report*. Retrieved from <http://nw3c.org/docs/ic3-annual-reports/2012-internet-crime-report.pdf?sfvrsn=5>
- Internet eXchange Point of Nigeria. (n.d.). Our History. Retrieved May 17, 2013, from <http://www.ixp.net.ng/index.php/about-ixpn/ixpn-historya>
- Interpol. (n.d.). 419 fraud. Retrieved October 05, 2012, from <http://www.interpol.int/Crime-areas/Financial-crime/Fraud/419-fraud>
- Ipe, Mi. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*, 2(4), 337–359. Retrieved from <http://hrd.sagepub.com/content/2/4/337>
- Jashapara, A. (2004). *Knowledge Management: An Integrated Approach*. Essex: Pearson Education Limited.
- Kaspersky Lab. (2011). 20-Fold Increase in Fraudulent Spam in Q3 2011. Retrieved March 05, 2013, from [http://www.kaspersky.com/about/news/spam/2011/20\\_Fold\\_Increase\\_in\\_Fraudulent\\_Spam\\_in\\_Q3\\_2011](http://www.kaspersky.com/about/news/spam/2011/20_Fold_Increase_in_Fraudulent_Spam_in_Q3_2011)
- Kingsley-Hughes, A. (2012). Apple: We Screwed Up! *Forbes*. Retrieved October 01, 2012, from <http://www.forbes.com/sites/adriankingsleyhughes/2012/08/07/apple-we-screwed-up/>
- Kvale, S. (2007). *Doing Interviews*. London: SAGE Publications Ltd.
- Lam, A. (2000). Tacit Knowledge, Organizational Learning and Societal Institutions: An Integrated Framework. *Organization Studies*, 21(3), 487–513. Retrieved from <http://oss.sagepub.com/content/21/3/487.abstract>
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

- Lee, M. (2011). Why My Email Went. Retrieved February 05, 2013, from <http://www.symantec.com/connect/blogs/why-my-email-went>
- Leiner, B. M., Cerf, V. G., Clark, D. D., Kahn, R. E., Kleinrock, L., Lynch, D. C., ... Wolff, S. (2009). A brief history of the internet. *SIGCOMM Comput. Commun. Rev.*, 39(5), 22–31. Retrieved from <http://doi.acm.org/10.1145/1629607.1629613>
- Levitt, T. (2006). *Ted Levitt on Marketing: A Harvard Business Review Book*. Boston, MA: Harvard Business School Publishing Corporation.
- Lewis, J., & Baker, S. (2013). *The Economic Impact of Cybercrime and Cyber Espionage*. Retrieved from <http://www.mcafee.com/us/resources/reports/rp-economic-impact-cybercrime.pdf>
- Libbenga, J. (2007). “I Go Chop Your Dollar” star arrested. *The Register*. Retrieved June 06, 2013, from [http://www.theregister.co.uk/2007/07/02/419\\_singer\\_caught/](http://www.theregister.co.uk/2007/07/02/419_singer_caught/)
- Long, J., & Mitnick, K. D. (2008). *No tech hacking: A guide to social engineering, dumpster diving, and shoulder surfing*. Burlington, MA: Syngress Publishing.
- Maier, K. (2000). *This House Has Fallen: Nigeria in Crisis*. Boulder, CO: Westview Press.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *The Academy of Management Review*, 20(3), 709–734. Retrieved from <http://www.jstor.org/stable/258792>
- Mbeke-Ekanem, T. (2000). *Beyond the Execution*. Lincoln, NE: Writer’s Showcase.
- McDermott, R. (1999). Why Information Technology Inspired But Cannot Deliver Knowledge Management. *California Management Review*, 41(4), 103–117. Retrieved from [http://www.moderntimesworkplace.com/good\\_reading/GRKnowledgeWork/IT\\_\\_\\_Knowledge\\_Management.McDermott.1999.pdf](http://www.moderntimesworkplace.com/good_reading/GRKnowledgeWork/IT___Knowledge_Management.McDermott.1999.pdf)
- Miles, M. B., & Humberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

- Minichiello, V., Aroni, R., & Hays, T. (1995). *In-depth Interviewing: Context and Narrative* (2nd ed.). Melbourne: Longman Cheshire.
- Mitnick, K. D., & Simon, W. L. (2002). *The art of deception: Controlling the human element of security*. Indianapolis, IN: Wiley Publishing.
- Moses, A. (2008). Jail the “greedy” scam victims, says Nigerian diplomat. *The Sydney Morning Herald*. Retrieved October 05, 2012, from <http://www.smh.com.au/news/technology/jail-greedy-scam-victims-diplomat/2008/08/21/1219262419867.html>
- Mouawad, J. (2008). Oil Prices Pass Record Set in '80s, but Then Recede. *The New York Times*. Retrieved February 07, 2013, from [http://www.nytimes.com/2008/03/03/business/worldbusiness/03cnd-oil.html?hp&\\_r=0](http://www.nytimes.com/2008/03/03/business/worldbusiness/03cnd-oil.html?hp&_r=0)
- Murillo, E. (2011). Communities of practice in the business and organization studies literature. *Information Research*, 16(1). Retrieved from <http://informationr.net/ir/16-1/paper464.html>
- National White Collar Crime Center. (2013). *The Briefing: February 2013*. Retrieved from [http://www.nw3c.org/docs/the-briefing-newsletter/the\\_briefing\\_february\\_2013.pdf?sfvrsn=11](http://www.nw3c.org/docs/the-briefing-newsletter/the_briefing_february_2013.pdf?sfvrsn=11)
- Newell, S., Robertson, M., Scarbrough, H., & Swan, J. (2009). *Managing Knowledge Work and Innovation* (2nd ed.). London: Palgrave Macmillan.
- Newell, S., Scarbrough, H., & Swan, J. (2001). From Global Knowledge Management to Internal Electronic Fences: Contradictory Outcomes of Intranet Development. *British Journal of Management*, 12(2), 97–111. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-8551.00188/abstract>
- Nhan, J., Kinkade, P., & Burns, R. (2009). Finding a Pot of Gold at the End of an Internet Rainbow: Further Examination of Fraudulent Email Solicitation. *International Journal of Cyber Criminology*, 3(1), 452–475. Retrieved from <http://cybercrimejournal.com/nhanetalljan2009.htm>

- Nicolini, D., Gherardi, S., & Yanow, D. (2003). *Knowing in Organizations: A Practice-based Approach*. (D. Nicolini, S. Gherardi, & D. Yanow, Eds.). New York: M.E. Sharpe.
- Nigeria High Commission. (2009). *Federal Government Unveils Vision 20:2020 Blueprint*. London. Retrieved from <http://www.nigeriahc.org.uk/uploads/news/vision202020blueprint.pdf>
- NigeriaMovies.net. (2007). Police Arrest Nkem Owoh in Holland. Retrieved June 06, 2013, from <http://nm.onlinenigeria.com/templates/?a=10158&z=3>
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14–37. Retrieved from [http://links.jstor.org/sici?sici=1047-7039\(199402\)5:1<14:ADTOOK>2.0.CO;2-G](http://links.jstor.org/sici?sici=1047-7039(199402)5:1<14:ADTOOK>2.0.CO;2-G)
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.
- Ogunmade, O. (2013). \$600bn Stolen by Nigerian Elite Since Independence. *THISDAY*. Retrieved July 04, 2013, from <http://www.thisdaylive.com/articles/-600bn-stolen-by-nigerian-elite-since-independence/150863/>
- Ojekodum, U. A., & Eraye, M. C. (2012). Socioeconomic Lifestyles of the Yahoo-Boys: A Study of Perceptions of University Students in Nigeria. *International Journal of Cyber Criminology*, 6(2). Retrieved from <http://www.cybercrimejournal.com/Ojedokun&Eraye2012julyijcc.pdf>
- Okeowo, A. (2013). After Grisly Mosque Attack, Nigeria's Boko Haram Terrorist Group Calls Out Obama. *Time*. Retrieved August 13, 2013, from <http://world.time.com/2013/08/13/nigerias-boko-haram-terrorist-group-launches-brazen-attack-challenges-obama/>
- Olatunji, D. (2013). Customs “officer” in fake car auction deal. *Vanguard*. Retrieved October 03, 2013, from <http://www.vanguardngr.com/2013/09/customs-officer-in-fake-car-auction-deal/>



- Olukotun, A. (2013). 2020: Failed vision and big power illusions. Retrieved May 10, 2013, from <http://www.punchng.com/viewpoint/2020-failed-vision-and-big-power-illusions/>
- Onion Inc.'s Tech Team. (2013). How the Syrian Electronic Army Hacked The Onion. Retrieved May 10, 2013, from <http://theonion.github.io/blog/2013/05/08/how-the-syrian-electronic-army-hacked-the-onion/>
- Orlikowski, W. J. (2002). Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organization Science*, 13(3), 249–273. Retrieved from <http://orgsci.journal.informs.org/content/13/3/249.short>
- Orlikowski, W. J. (2007). Sociomaterial Practices: Exploring Technology at Work. *Organization Studies*, 28(9), 1435–1448. Retrieved from <http://oss.sagepub.com/content/28/9/1435.abstract>
- Orr, E. J. (1990). Sharing knowledge, celebrating identity: Community memory in a service culture. In D. Middleton & D. Edwards (Eds.), *Collective Remembering* (pp. 168–189). London: SAGE Publications Ltd.
- Oxford University Press. (2013). Internet. Retrieved February 13, 2013, from <http://oxforddictionaries.com/definition/english/Internet>
- Pawlik, A. (2013). The next billion internet users and the rise of the smartphone. Retrieved April 15, 2013, from <http://www.itproportal.com/2013/03/06/next-billion-internet-users-and-rise-smartphone/>
- Peel, M. (2009). *A Swamp Full of Dollars: Pipelines and Paramilitaries at Nigeria's Oil Frontier*. London: I.B. Tauris & Co. Ltd.
- Pepitone, J. (2013). AP hack proves Twitter has a serious cybersecurity problem. Retrieved April 24, 2013, from <http://money.cnn.com/2013/04/23/technology/security/ap-twitter-hacked/index.html>
- Perez, S. (2013). An App “Middle Class” Continues To Grow: Independently Owned Apps With A Million-Plus Users Up 121% Over Past 18 Months. *TechCrunch*. Retrieved November 09, 2013, from <http://techcrunch.com/2013/11/08/an-app-middle-class->

continues-to-grow-independently-owned-apps-with-a-million-plus-users-up-121-in-past-18-months/

- Pfeffer, J., & Sutton, R. I. (2000). *The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action*. Cambridge, MA: Harvard Business School Press.
- Polanyi, M. (1946). *Science, Faith and Society*. London: Oxford University Press.
- Polanyi, M. (1958). *Personal Knowledge: Towards a Post-Critical Philosophy*. London: Routledge & Kegan Paul.
- Polanyi, M. (1962). Tacit Knowing: Its Bearing on Some Problems of Philosophy. *Review of Modern Physics*, 34, 601–616. Retrieved from <http://www.faculty.english.vt.edu/Collier/km/pdf/tacitknowing.pdf>
- Polanyi, M. (1966). The logic of tacit inference. *Philosophy*, 41(155), 1–18. Retrieved from <http://www.jstor.org/stable/3749034>
- Polanyi, M. (1967). *The Tacit Dimension*. London: Routledge & Kegan Paul.
- Powell, W. W., & Grodal, S. (2005). Networks of Innovators. In J. Fagerberg, D. C. Mowery, & R. R. Nelson (Eds.), *The Oxford Handbook of Innovation* (pp. 56–85). Oxford: Oxford University Press.
- Punch, K. F. (2005). *Introduction to Social Research: Quantitative and Qualitative Approaches* (2nd ed.). London: SAGE Publications Ltd.
- Ragin, C. C., & Amoroso, L. M. (2011). *Constructing Social Research* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Rege, A. (2009). What's Love Got to Do with It? Exploring Online Dating Scams and Identity Fraud. *International Journal of Cyber Criminology*, 3(2), 494–512. Retrieved from <http://www.cybercrimejournal.com/AunshulIJCCJuly2009.pdf>
- Ribadu, N. (2007). Cybercrime and Commercial Fraud: A Nigerian Perspective. In *Modern Law for Global Commerce: Congress to celebrate the fortieth annual session of*

- UNCITRAL. Vienna. Retrieved from [http://www.cnudmi.org/pdf/english/congress/Ribadu\\_Ibrahim.pdf](http://www.cnudmi.org/pdf/english/congress/Ribadu_Ibrahim.pdf)
- RISE Networks. (2013). Youth Unemployment In Nigeria: Shocking Statistics, Facts And Why The Future May Not Be So Bright Afterall. Retrieved from <http://risenetworks.org/2013/05/16/youth-unemployment-in-nigeria-is-there-hope-for-nigerian-youth/>
- Rowley, J. (2007). The wisdom hierarchy: representations of the DIKW hierarchy. *Journal of Information Science*, 33(2), 163–180. Retrieved from <http://jis.sagepub.com/content/33/2/163>
- Schmidt, K. (2012). The Trouble with “Tacit Knowledge.” *Computer Supported Cooperative Work*, 21(2-3), 163–225. Retrieved from <http://link.springer.com/article/10.1007/s10606-012-9160-8>
- Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy*. New York: Harper.
- Seodotcom. (2011). The History of Search [infographic]. Retrieved May 15, 2013, from <http://www.seo.com/blog/history-search-infographic/>
- Shapin, S. (2011). An Example of the Good Life. *London Review of Books*, 33(24), 23–25. Retrieved from <http://www.lrb.co.uk/v33/n24/steven-shapin/an-example-of-the-good-life>
- Shuler, R. (2002). How Does the Internet Work? Retrieved February 13, 2013, from <http://www.stanford.edu/class/msande91si/www-spr04/readings/week1/InternetWhitepaper.htm>
- Silva, L., Goel, L., & Mousavidin, E. (2008). Exploring the dynamics of blog communities: the case of MetaFilter. *Information Systems Journal*, 19(1), 55–81. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2575.2008.00304.x/abstract>
- Smith, D. J. (2007). *A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria*. Princeton, NJ: Princeton University Press.

- Sophos. (2013). *Security Threat Report 2013*. Retrieved from <http://www.sophos.com/en-us/security-news-trends/reports/security-threat-report/malware-attacks/facebook-security.aspx>
- Spender, J. C. (1996). Organizational knowledge, learning and memory: three concepts in search of a theory. *Journal of Organizational Change and Management*, 9(1), 63–78. Retrieved from [http://www.jcspender.com/uploads/Spender\\_3\\_concepts\\_JOCM\\_96\\_o31.pdf](http://www.jcspender.com/uploads/Spender_3_concepts_JOCM_96_o31.pdf)
- Spender, J. C. (1998). Pluralist Epistemology and the Knowledge-Based Theory of the Firm. *Organization*, 5(2), 233–256. Retrieved from <http://org.sagepub.com/content/5/2/233>
- Stenbacka, C. (2001). Qualitative research requires quality concepts of its own. *Management Decision*, 39(7), 551–555. Retrieved from <http://www.emeraldinsight.com/journals.htm?articleid=865241&show=abstract>
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: SAGE Publications, Inc.
- Suchman, L. (1987). *Plans and Situated Actions: The Problem of Human/Machine Communication*. Cambridge, UK: Cambridge University Press.
- Swan, J. (2008). Knowledge. In S. R. Clegg & J. R. Bailey (Eds.), *International Encyclopedia of Organization Studies* (pp. 751–754). Thousand Oaks, CA: SAGE Publications, Inc.
- Sykes, W. (1991). Taking stock: Issues from the literature on validity and reliability in qualitative research. *Journal of the Market Research Society*, 33(1), 3–10.
- Symantec. (n.d.-a). What is Cybercrime? Retrieved February 08, 2013, from <http://us.norton.com/cybercrime-definition/promo>
- Symantec. (n.d.-b). Bots and Botnets—A Growing Threat. Retrieved March 07, 2013, from <http://us.norton.com/botnet/>
- Symantec. (2011). Norton Study Calculates Cost of Global Cybercrime: \$114 Billion Annually. Retrieved February 10, 2013, from [http://www.symantec.com/about/news/release/article.jsp?prid=20110907\\_02](http://www.symantec.com/about/news/release/article.jsp?prid=20110907_02)

- Symantec. (2012). 2012 Norton Cybercrime Report. Retrieved February 10, 2013, from [http://now-static.norton.com/now/en/pu/images/Promotions/2012/cybercrimeReport/2012\\_Norton\\_Cybercrime\\_Report\\_Master\\_FINAL\\_050912.pdf](http://now-static.norton.com/now/en/pu/images/Promotions/2012/cybercrimeReport/2012_Norton_Cybercrime_Report_Master_FINAL_050912.pdf)
- Tade, O., & Aliyu, I. (2011). Social Organization of Internet Fraud among University Undergraduates in Nigeria. *International Journal of Cyber Criminology*, 5(2), 860–875. Retrieved from <http://www.cybercrimejournal.com/tadealiyui2011julyijcc.pdf>
- The Economist. (2012). Blatancy and latency: Why internet scams seem so obvious. Retrieved February 05, 2013, from <http://www.economist.com/node/21557726?fsrc=scn/gp/wl/ar/blatancyandlatency>
- The Nigerian Communications Commission. (2013). Subscriber Data. Retrieved August 21, 2013, from [http://www.ncc.gov.ng/index.php?option=com\\_content&id=125&Itemid=73](http://www.ncc.gov.ng/index.php?option=com_content&id=125&Itemid=73)
- Thomas, A. (2000). Poverty and the “end of development.” In T. Allen & A. Thomas (Eds.), *Poverty and Development into the 21st Century*. Oxford: Oxford University Press.
- Townsend, P. (1979). *Poverty in the United Kingdom*. Harmondsworth: Penguin.
- Tsoukas, H. (1996). The Firm as a Distributed Knowledge System: A Constructionist Approach. *Strategic Management Journal*, (17), 11–25. Retrieved from <http://mis10.wikispaces.com/file/view/The+firm+as+distribute+Know-+Tsoukas.pdf>
- Tsoukas, H., & Vladimirou, E. (2001). What is Organizational Knowledge? *Journal of Management Studies*, 38(7), 973–993. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-6486.00268/abstract>
- U.S. Department of State. (2007). *International Financial Scams – Internet Dating, Inheritance, Work Permits, Overpayment, and Money Laundering*. Retrieved from [http://travel.state.gov/pdf/international\\_financial\\_scams\\_brochure.pdf](http://travel.state.gov/pdf/international_financial_scams_brochure.pdf)
- UNODC. (2013). *Comprehensive study of the problem of cybercrime and responses to it by Member States, the international community and the private sector*. Vienna. Retrieved

from [http://www.unodc.org/documents/organized-crime/UNODC\\_CCPCJ\\_EG.4\\_2013/UNODC\\_CCPCJ\\_EG4\\_2013\\_2\\_E.pdf](http://www.unodc.org/documents/organized-crime/UNODC_CCPCJ_EG.4_2013/UNODC_CCPCJ_EG4_2013_2_E.pdf)

Von Hippel, E. (1994). “Sticky Information” and the Locus of Problem Solving: Implications for Innovation. *Management Science*, 40(4), 429–439. Retrieved from <http://www.jstor.org/stable/2632751>

Wall, A. (2013). History of Search Engines: From 1945 to Google Today. Retrieved May 15, 2013, from <http://www.searchenginehistory.com/>

Walsham, G. (2002). What Can Knowledge Management Systems Deliver? *Management Communication Quarterly*, 16(2), 267–273. Retrieved from <http://mcq.sagepub.com/content/16/2/267>

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.

Wenger, E. (2001). Communities of Practice. In E.-C. N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 2339–2342). Oxford: Pergamon. doi:<http://dx.doi.org/10.1016/B0-08-043076-7/00361-2>

Winchester, H. P. M., & Rofo, M. W. (2010). Qualitative Research and Its Place in Human Geography. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3rd ed., pp. 3–25). Ontario: Oxford University Press.

Winter, G. (2000). A Comparative Discussion of the Notion of “Validity” in Qualitative and Quantitative Research. *The Qualitative Report*, 4.

Workman, M. (2007). Gaining Access with Social Engineering: An Empirical Study of the Threat. *Information Systems Security*, 16(6), 315–331. Retrieved from <http://dx.doi.org/10.1080/10658980701788165>

World Bank Group. (2012). The World Bank Databank - Create Widgets or Advanced Reports and Share. Retrieved October 10, 2012, from <http://databank.worldbank.org/data/Views/Reports/Chart.aspx>

- Yin, R. K. (2009). *Case Study Research: Design and Methods* (4th ed.). Thousand Oaks, CA: SAGE Inc.
- Yusuf, M. O. (2005). The Role of Cybercafés in the Provision of Access to Internet Resources in Ilorin, Nigeria. *African Journal of Educational Studies*, 3(2), 225–246. Retrieved from [http://www.unilorin.edu.ng/publications/yusufmo/Publication 24.pdf](http://www.unilorin.edu.ng/publications/yusufmo/Publication%2024.pdf)
- Zetter, K. (2012). FBI Fears Bitcoin's Popularity with Criminals. *Wired*. Retrieved August 23, 2013, from <http://www.wired.com/threatlevel/2012/05/fbi-fears-bitcoin/>
- Zhang, W., & Watts, S. (2008). Online communities as communities of practice: a case study. *Journal of Knowledge Management*, 12(4), 55–71. Retrieved from <http://dx.doi.org/10.1108/13673270810884255>
- Zulu, B. (2008). Microsoft Combats Cybercrime in Nigeria. Retrieved October 13, 2013, from [http://www.pcworld.com/article/152784/nigeria\\_cybercrime.html](http://www.pcworld.com/article/152784/nigeria_cybercrime.html)





## Appendix A – Interview guide

- How do Nigerians get into the field of Internet fraud?
  - How are they introduced?
  - How is information found?
  - How is information shared?
- How would you describe the typical Nigerian Yahoo boy?
- Do Yahoo boys operate in communities or alone?
  - If so, how are they organized?
  - How do they share information?
  - Local co-operation or all of Nigeria?
  - Over the Internet or in person? Forums, chat, email, Skype?
- Why do you think Nigerians get into the field of internet-based scams?
  - Poverty?
  - The thrill?
  - Respect?
  - Influence from music artists such as 419 Crew, Yahoo Boy No Laptop?
  - Other reasons?
- How does Internet fraud work?
  - Different methods?
  - Which work the best/earn you the most money?
  - Any trends or changes in methods?
  - Which countries are the main targets?
- What do the Yahoo boys spend the money they make on?
  - Normal consumption (food, rent, fuel, etc.)
  - Buy items to sell.
  - Party, luxury items, etc.
  - Other.
- How do you think Yahoo boys feel about conducting Internet fraud?
  - Have to do it to survive?
  - The targets are rich anyway?
  - Taking back what the foreigners stole?
- Do Yahoo boys fear getting caught?
  - How to not get caught?
- What are the Yahoo boys' roles in the larger society of Nigeria?
  - Are there others that benefit from their activities?
  - Are there others that are disadvantages by their activities?
- How do you think Internet fraud affects and portrays Nigeria as a whole?
  - Is it a part of society?

- How do foreign countries view Internet fraud, and what does it do to the perception of Nigeria internationally?
- Does Nigeria's history with colonialism, foreign companies extracting money, political corruption and unrest affect the Yahoo boys? Has it made it easier for Nigerians to get into Internet fraud?
  - For example: Scams based on events of real business or political corruption?
  - Is there a connection between Nigeria's past and email fraud?
- What are the typical Yahoo boys plans for the future?
  - Continuing as long as possible?
  - Hoping to do something else? If so, what?
- Do you think conducting Internet fraud has taught the Yahoo boys any skills for other work?
  - For example: Computers, grammar/writing, analytical thinking, persuasion skills, sales, marketing, or creativity?
- Do you see the possibility of setting up legal companies based on the Yahoo boys' experiences, knowledge and skills?
  - For example: Web design firms, copy reading services, scam protection services, web or computer programming, sales, trade & business?